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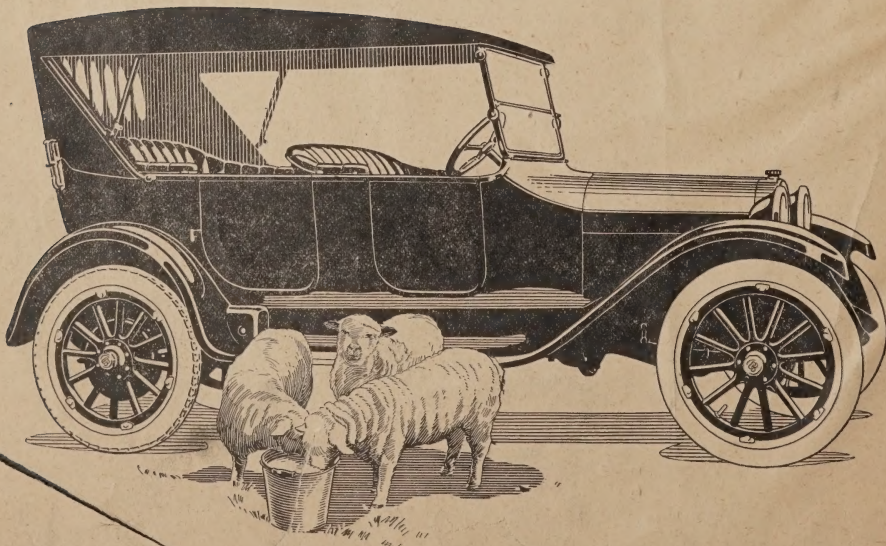
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Spring Drive for Agricultural Development Starts in Cloverland

By HALSTEAD WORTH

THE fifteen counties of the upper peninsula of Michigan and many other counties of the northeastern section of Wisconsin, represented by approximately 4,500 farmers and their wives at the Cloverland Farmer's Institute at the Menominee County Agricultural School on March 29, 30, 31, are well secure in the knowledge that their farm forces will be at the starting tape this spring for the greatest agricultural "derby" in the history of this rejuvenated timber stronghold.

There was not a speaker—and there were many of them at this annual convention of timber land converters and stock raisers—but who sounded the conviction that the year of 1921, with all its load of "coldwater poultices", will, besides rewarding the fighter, prove to be the greatest in history for rural prosperity and more especially in Cloverland, which has well been called the "Land of Agricultural Opportunity."

Dean H. L. Russell, of the College of Agriculture, University of Wisconsin, who all agriculturists will recognize, was one of the many men of note who planked down his message with a good charge of TNT behind it, sending the institute audiences back to their homes with an exuberance of feeling over the outlook, which only another glacial epoch could prevent from being of benefit to Cloverland. Dean Russell endeavored to bring home the fact that it is up to rural and city communities to serve the settler. He is admittedly the leading agricultural authority in the northwest, and his address made a lasting

impression on the great crowd which heard him.

Perhaps the greatest way in which the settler can be served in the opinion of L. F. Livingstone, the man who put over the giant land clearing project in Marinette county last year, is through the establishment of a system of credits, whereby the immigrant or new settler with only a limited sum of money can purchase such land as can be worked with reasonable profit at a very small initial outlay, thus enabling him to find the means for either joining a "Dynamite Club," for the wholesale purchase of explosives, or do his own clearing on a smaller scale, but so he can at least do the latter.

In speaking at the men's session at the Institute on Wednesday, March 30, Mr. Livingstone, who has started in Menominee county with the aid of the Menominee Chamber of Commerce, a similar organization as that now existent in Marinette county, through which dynamite is purchased at a low price, explained his plans further and specifically, declaring the extension plan was the only way of securing a pool of money from a given area and thus serving the small land owner, with an over supply of scrub timber to an extent and point that he would be unable to reach if left to his own resources. This plan was

proven successful at Wausaukee a year ago, and from indications at the institute will be duplicated as successfully, not alone in Menominee county, but in many other cut-over areas of Greater Cloverland.

As this problem of extending a helping hand to those who have been "put to it" for help during the past three years, was the greatest to be presented at the institute, it resulted in many ideas of co-operation being carried back home by those who traveled far to gain them, which the establishment of the farm bureau plan cannot help but further. This apparent wish to aid the settler will be the greatest factor in getting Cloverland across the starting line with the rest of the leaders in the race for land development, which has become the predominate aim of the three states in the Cloverland territory.

As an example already evidenced of the trend toward real progress in modern farm marketing and community service, J. A. Waldron, M. A. C. dairy specialist, explained the plan for centralizing the dairy market of each county. This plan has already been inaugurated in Delta county, Michigan, and while now only in its infancy was declared to be on a sound footing by B. P. Pattison, Delta county agent, who stated further that the majority of the dairy farms of that

district had expressed their willingness to distribute their product from one central point at uniform prices to be determined by the unquestionable standards set by supply and demand.

This marketing of dairy products is a part of the farm bureau program. Frank Erickson, a dairy farmer of Stephenson, Menominee county, held that while it might possibly bring many milk dealers into dispute, would ultimately bring about the only solution of the all important problem of marketing the dairy products of a given farm community at a reasonable profit, with a minimum cost of distribution. One of the salient features of this plan would be the ease with which butter, cheese, milk, and cream, would be manufactured and disposed of with little inconvenience and an absence of speculation which has caused the greatest losses of today, owing to the fact that the producer is getting so little of the money paid by the consumer for his product.

R. N. Kebler, superintendent of the Menominee County Agricultural School, has not only furnished upper peninsula farmers with the means of meeting at such an institution as he represents, but has also enlisted the active co-operation of the Chatham branch of the Michigan Agricultural College. D. L. McMillan, superintendent of the experiment station there, outlined his land analysis service with the Cloverland districts represented at the convention. Under his plan it will be an easy matter for prospective

(Continued on page 8)



Menominee County, Michigan, School of Agriculture and Domestic Economy

CLOVERLAND MAGAZINE

Eight Thousand Oconto Farmers Attend Meeting

By ROBERT AMUNDSON

IF I were a poet, I would tell you in glowing terms of the beauties of nature, the peace and contentment of country life, and write an eulogy to the happy, prosperous and untroubled farmer. I would make poetry out of the joys of country life. How grand it is to feel the soft untrodden earth underneath and have the women throw your rubbers outside when you bring some of it in.

It is an inspiration to see the contented cattle grazing in the lowland meadows, until you discover that half of them are in the oat field; to see the little lambs jump and frisk their tails in the morning sunlight when they are frightened to it by the neighbor's sound dog.

'Tis a beautiful scene in the harvest fields to see the husky farmer digging his potatoes and his wife picking them up.

However great the joys of the out of doors may be, it is nothing compared to the genuine feeling of contentment and comfort that comes from living on fresh farm cooking. There is fresh coffee from Java, Alaska salmon, bread from Minneapolis flour, Swift's ham, rich yellow "oleo," Mary Ann cookies and onions just out of the garden.

Knowing that the farmers would not approve of having these much heralded blessings jeopardized by the



Stock Judging at Klondike Meeting.

contrivances and somewhat dignified enthusiasm.

In Oconto county, Wisconsin, alone in February and March, a total of over eight thousand people took part in the different meetings at Klondike, Spruce, Oconto and Gillett. Thirteen hundred exhibits of farm crops, household goods, school exhibits and mercial exhibits made by local merchants. At Klondike preparations for the annual farmers' festival began before Christmas and continued until the biggest institute ever held here was completed. The money for the premiums and other expenses were all raised in the community. A dance was given in advance and the proceeds turned in towards the festival fund. During the evenings of the two days, programs by the surrounding schools and local talent were given which netted enough to make it self supporting.

A stock judging contest between two schools competing for a silver trophy

Oconto county, produced not only an abundance of fine quality exhibits, showing the efficiency and ability of

potatoes the Oconto county certified potato growers have sold all their potatoes for from \$1.00 to \$2.50 per bushel. With the aid of the new certified potato growers association, Oconto county will probably have from twenty to thirty thousand bushels of certified potatoes next year.

During the third mid-winter fair, there was a premium on preferred positions for standing room during the two days. The Gillett Mid-Winter Fair is the aristocrat for extra fine grains, hay and corn. Exhibits are entered there from all over the county. There was exceptionally keen competition for the twelve silver cups given for premiums on grains. Grains are not all that is raised, however, for there were 36 entries in the baby contest. Merchants and commercial men had 26 booths showing their wares and the farmers, schools and farm women 550 exhibits. Some \$250.00 in premiums were given away. The results are typically expressed by one farmer who said, "I tried to sell my barley for 60 cents per bushel and there seemed to be no call for it. I showed a sample at the Gillett Fair where I won a prize and now they come and get it at \$1.00 per bushel."

A general improvement is very evident in the quality of the products where the producer has been ac-



Gillett Mid-Winter Fair.

blundering efforts of a literary amateur, I am going to review in simple style, without elaboration, an important part of the activities of the Clover-



Inspection Tour to "Jersey Crest" Farm.

land farmer during those dull months of the year when according to some city editors, he is supposed to be sitting around the country store spitting on the stove and listening to tales of the civil war.

If the fellow who gets his mental picture of farm folks from the movies could live in a real Cloverland community during the winter months, he would be apt to agree that "Fatty" Arbuckle acted to please his audience rather than to play the part of the farmer.

When it comes to pep, enthusiasm and community spirit, the average Cloverland community far excels the older settlements with more modern

cup kept the young people interested. Another feature of this year's program at the Klondike festival was a debate among four local farmers, which decided that single blessedness was not conducive to community welfare and individual happiness. The Klondike Advancement Association was born then. Its job will be to further the interests of Klondike farmers. A cow testing association was started and will be going as soon as details are completed. The question of marketing cheese was another subject which brought forth lively discussion.

Spruce, the center of what is perhaps the most fertile township in



Sunny Brook Harvest Festival.

both farm and home, but brought forth talent in music, drama and oratory. Bob Hall's band and orchestra of over twenty pieces (and every one a farm boy or girl), made the hall ring with life and made everyone glad and proud to be living in Spruce. Since some ingenious agents of the law had felt it their solemn duty to enforce the penalties for delinquent dog tax payers, to the extent of a good many hundred dollars, the different views represented threshed it out on the platform in a spirited debate before an audience of six hundred people. The debaters favoring the repeal of the law won. As many as 850 people were in the Spruce hall at one time.

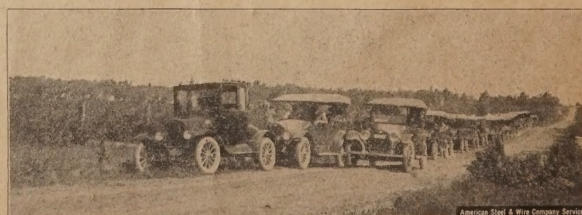
As might be expected the farmers around Oconto put on what Mr. Braun, declared to be the largest potato exhibit outside of the state show. Thru the exhibits and development work on

customed to exhibiting or seeing exhibits, and a large amount of seed changed hands during the fairs, thus helping to standardize the products, which is the fundamental requirement for successful marketing.

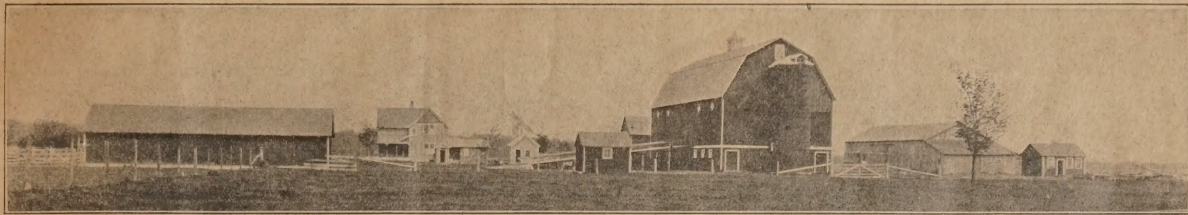
I once heard a merchant in a southern Wisconsin town say: "Aw, there's no use. The farmers around here don't take any interest in these things. You can't do anything with them."

That expression is common and is true. It is hard to do anything "with them" because they are hard to "do," but it is simple to do "for them" and they will return the favor many fold.

With a little help in organizing the different forces, the typical Cloverland community is very much alive and each is a part of the great force that is pushing back the frontier of a promising land.



Oconto County Farmers Returning From a Round-up.



Potato Seed Certification in Minnesota

By A. G. TOLIAS, Chief Inspector

TWO years ago the Minnesota State Legislature enacted a law creating the Minnesota Board for Seed Potato Inspection and Certification. Immediately after the passage of this law the board was organized and established the rules and regulations under which the work has been carried on the past two seasons. Before putting the present certification plan in operation it was necessary to carry on an extensive potato improvement program to standardize Minnesota potatoes and to familiarize the growers with potato diseases and their control.

Six hundred and ten fields of potatoes were inspected for certification in 1920 and the observations made on these fields and the stock grown on them has emphasized further the necessity of more improvement work. Buyers who use Northern grown seed potatoes are entitled to nothing but first-class seed stock when they buy certified potatoes. In this talk I wish to discuss certification from the standpoint of the grower and the buyer.

To produce seed potatoes of quality is the problem of the grower. Every grower has what might be called a strain, or strains of the variety, or varieties that he is growing. Some of these strains are vigorous, producing large yields while others may be weak producing low yields. The buyer, whether he is buying for his own use or for sale to other growers, wants to obtain good, vigorous seed potatoes, free from disease, and as a general rule is willing to pay a premium for superior stock. A certain lot of potatoes may on the whole be very vigorous but here and there weak plants will show up in the field and if they are not removed, the tubers born under them may be included in the following year's planting. Lack of attention to such plants will in time lower the productiveness of the strain. Under similar conditions some tubers will produce plants of high productive power while others will not, and to all external appearances the tubers may be the same. The time to get rid of the weak, poor, producers is during the growing season. This can best be done by the maintenance of a special seed plot every year. The first consideration, however, for every person contemplating the growing of potatoes for certification is to have a good, vigorous strain to begin with. Observation this past year has shown us that certain growers have some mighty fine seed stock while others would do well to dispose of their present stock for table use and then obtain seed potatoes of the superior strains.

In the past, growers having their potatoes inspected for certification have been requested to maintain a seed plot each year. In the future the maintenance of a seed plot each year will be required or if a grower does not want to grow a seed plot he will be required to obtain his seed potatoes from a grower who does maintain one. It is up to the grow-

ers to do their share to make certification a success, and by maintaining a seed plot and paying special attention to the seed stock that is to be used on the field to be inspected for certification, they are contributing to the success of the movement. The seed plot should consist of approximately one-twelfth the total acreage devoted to potatoes. The seed to be used on this plot should be either hill selected or at least selected at digging time, and after planting should be given the best of attention during the entire growing season. A piece of ground not having grown potatoes for four or five years is to be preferred. Several thorough inspections should be made during the summer and all weak and otherwise undesirable plants should be removed. Enough seed potatoes should be selected as mentioned above for the next year's seed plot and carefully stored separately under the best conditions obtainable. The rest of the tubers produced on the plot should be carefully picked, leaving out all bruised and cut tubers and should be kept separately for planting on next year's field intended for certification.

The field intended for certification should be carefully inspected several times during the growing season and all weak and otherwise undesirable stock removed. Care in keeping out weeds and undesirable plants will mean fewer field rejections than were made during the past two seasons. When the potatoes are dug, it is abso-

lutely necessary to avoid injury since every cut or bruise makes a favorable point for dry rot inspection. The organisms causing the various types of dry rot in potatoes live in the soil and are of course brought into the storage cellars with the potatoes. Most of the infection is made through wounds caused by the digger or by careless handling after digging. I had occasion to watch several men bringing their potatoes from the field and dumping them through the hatches in the roof of the storage cellars to the ground 8 or 10 feet below. It is evident that with such handling, but few potatoes escape bruising, and if the temperature and moisture conditions are favorable for the development of dry rot, one can readily see what might happen. Potatoes handled in this way, although they may be of good type, pure as to variety, relatively free from diseases and of high producing power are not deserving of a certificate because a buyer of certified seed potatoes is entitled to good sound stock. A number of cases have been brought to our attention this year of rejections on account of excessive amounts of dry rot in certified stock. The final inspection being made as shortly after digging as possible when the presence of dry rot has not become evident, it becomes necessary for the grower to make use of his honesty when sacking his potatoes for shipment, and to leave out all oversized tubers and all injured or cut tubers, together with

those showing any signs of dry rot. This brings up the question of grading.

All certified potatoes are required to be graded over a 1½ in. square mesh screen. Now most graders, especially those of the shaker type, cause more or less injury to potatoes, especially if the potatoes are more or less immature. As far as the removal of small undersized potatoes are concerned most of the best graders do a very good job, but in the case of certified seed potatoes it is necessary to remove all oversized potatoes as well as any that might be seriously affected with scab or rots. It seems feasible to me to grade certified potatoes at digging time when certain pickers could be readily trained to pick only the right tubers for certification while the small, overly large and cut tubers could be picked up by other pickers separate from the other stock, for which they would receive a cent or two more per bushel for the extra work involved. If complaints on account of the presence of too much dry rot keep coming, grading at digging time in the above mentioned manner will have to be made a requirement.

The question of storage should also be given proper consideration. A well ventilated storage cellar kept at a temperature of 35° to 40° Fahrenheit will prevent a large loss by natural shrinkage and by dry rots.

All certified seed potatoes should be sold in even weight sacks properly tagged with the official certification tag. This is what the buyers expect and we want our certified stock to come up to their expectations in this respect. A number of instances have come to our attention, where certified potatoes have been put up in all sizes of sacks and in various conditions of repair. Individuals who insist on this practice are not only hurting their own reputations but they are hurting their neighbors as well, who are probably putting up their potatoes in first-class shape and they are also putting certification in disrepute. Some attention should also be given to the proper loading of cars so as to avoid possible loss in transit by freezing, or other causes.

I have said nothing yet as to the reasons for doing this seemingly large amount of work. There has been and always will be a universal demand for first-class seed potatoes. Certification is a means by which we are trying to supply this demand. A first-class article, no matter what it is, will always command a premium over an inferior grade. The grower who must come to Minnesota for his seed potatoes is perfectly willing to pay a premium for seed potatoes of quality. If he does pay a premium for certified stock and the grower who sells it tries to slip something over, buyers in general soon hear of it and confidence in the value of growing certified seed is shaken. Produce quality and the extra work involved will be well repaid.



Caterpillar Tractor Meets Most Severe Demand

By H. W. CHOWN

No one knows who invented the wheel, but whoever it was he gave to the world one of the greatest labor saving devices known to man. Until Watts received his inspiration from the boiling tea kettle and harnessed steam the use of the wheel was limited to the strength of man and of animals.

For a number of years steam was only applied as power to locomotives traveling on steel rails, but from the locomotive was conceived the idea of the steam engine or tractor as it was called, which could be used for overland hauling. These engines, however, could only be used on hard roads or firm soils.

It was about this time that the value of river bottom lands began to claim the attention of agriculturists. Enriched by years of overflow the soil, when drained and cleared, needed but to be slightly worked to produce abundant crops. Many methods were tried and in almost every instance failure was the result.

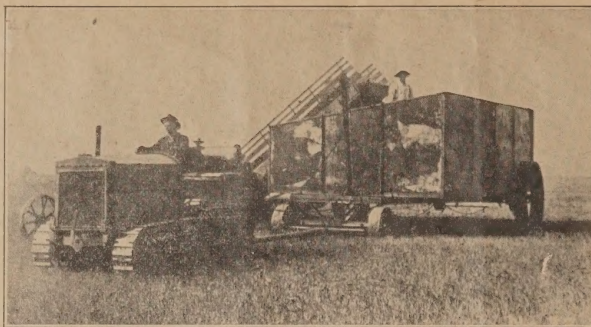
Among the pioneers in this work was Benjamin Holt, who for a great many years had built steam engines for heavy mountain freighting and other such work. Mr. Holt was interested in the development of the fertile valleys of the San Joaquin river.

Realizing that this was a problem beyond the capacity of animal power Mr. Holt endeavored to adapt tractor power to the job, and during a period of years experimented with various heights and widths of wheels, equipped with many types of lugs, in the attempt to obtain traction for this development work. His last experiment in this line was a steam tractor with drive wheels 36 feet in width, but the result was unsatisfactory.

As a result of these experiments Mr. Holt was convinced that no wheel, no matter how high or how wide, provided the solution of the problem and with characteristic Yankee ingenuity he set to work to solve this problem. The result was the "Caterpillar" Tractor, which, because of its ability to obtain traction under all conditions, was able to deliver its power at the drawbar for the drainage and clearing of this valuable land.

The success of the "Caterpillar" in this work immediately brought it world recognition and its record for consistent performance in industry and agriculture and in solving the transportation problems of the great world war are now a matter of common knowledge.

Primarily an agricultural tractor the "Caterpillar" has been developed to meet the most severe requirements of industrial service and by reason of this development has increased its value for agricultural service thru its ability to stand up under the most severe usage.



Tractor Pulling Bundle Wagon on Martin Olson's Farm, Moorhead, Minn.

The problem encountered years ago in the San Joaquin Valley is constantly reoccurring one in the various bottom lands of the middle west, and in fact wherever the soil is tilled.

Returns from most farm crops depend upon handling certain operations, the plowing, seed bed preparation, harvesting at just the right time and the ability of the "Caterpillar" to meet these requirements are of real interest to farmers everywhere.

Mr. Martin Olson, Moorhead, Minn., is one of the pioneers of tractor farming in the middle west country. He gives his experiences with tractors as follows:

"You have asked me, 'Why did I purchase a 'Caterpillar' Tractor?'

I have been using tractors since 1911 and was, I think, among the first to use tractors in the Red River Valley. My experience has always been with wheel tractors, however, I must say I was never able to use them successfully for Spring work because they would mire down and pack the soil leaving their mark thru the fields which did not make their work very desirable. If the ground was a little soft and wet I could not use them and naturally had to use the horses for Spring seeding. This Spring I tried to use my wheel tractors but mired down. I then made up my mind to buy a 5-ton "Caterpillar" Tractor.

We are pulling 32-foot spring-tooth harrow at 3 miles per hour. In drilling our wheat we pulled three 22 disc drills, drilling a strip 33 feet wide. We are able with this equipment to harrow 120 acres per day, or we can drill 125 acres per day of 10 hours. I like the "Caterpillar" tractor very much indeed for this work because it does not pack the soil and permits me to do the work I think a tractor should do if it is to be successful in handling work on the

farm of to-day.

Below are some of the costs which will show you what it is costing me to harrow and drill.

Harrowing:

Gasoline	\$12.00
Oil and grease	1.00
Depreciation	5.00
Repairs	1.00
Operator	5.00
Total	\$24.00

Figuring actual costs it therefore costs about 11 cents an acre for gasoline and oils; 16 cents an acre for repairs, or a total of 20 cents per acre including pay for operator.

In drilling it is necessary to have a man follow the drills, adding a little to the cost per acre as follows:

Drilling:	
Gasoline	\$10.50
Oil and grease	1.00
Depreciation	5.00
Repairs	1.00
Operator	5.00
Seeder man	3.00
Total	\$25.50

Cost per acre, gasoline and oils; depreciation and repairs 14 cents; total cost per acre, including operator and seeder man 20 cents.

You will note our gasoline consumption is less in drilling than in pulling the harrows. The harrow is the same load you would ordinarily put behind 16 horses, whereas the drills would require 12 horses. Next season I propose to hitch four drills behind the 5-ton and I am sure it will handle them very satisfactorily.

Since purchasing the tractor I find I can get along very nicely without 12 horses which I have on hand, therefore, on the 20th of July I will hold a public auction and sell the 12 horses and such farm implements as cannot be successfully used with the tractor."

Mr. Olson sold his horses and when

asked for information regarding his experience with a completely tractorized farm he wrote as follows:

"For your information I am attaching a photo and giving you some costs in connection with our threshing. I have known for some time that considerable expense was wasted in doing our threshing so we designed a Bundle Wagon for use in connection with our Shock Loader and in this way have been able to reduce our threshing expense quite a good deal.

Our bundle wagon is built on a pair of old trucks and has a bed 20 feet long, 14 feet wide and approximately 8 feet high. The front end can be elevated so that when delivering a load of bundles to the separator they slide out the rear end much the same as a dump cart would operate. This wagon is handled by the 5-ton "Caterpillar" tractor. We use it in direct speed when loading the wagon and then go in high speed, 6 miles per hour, from the field to separator and return. We handle our 40 x 62 separator with the 10-ton "Caterpillar" tractor. Both tractors gave us dependable service.

Our plan of operating requires the following men:

1 tractor operator for shock loader	\$8.00
1 bundle wagon man	8.00
1 tractor operator for bundle wagon	8.00
1 separator and tractor man	8.00
4 pitchers	32.00
1 grain hauler	8.00
gas and oils for tractors and trucks	36.80
Total per day	\$108.80
Comparing this expense with the old system we have:	
10 bundle wagons, team and man at \$11.00	110.00
5 field pitchers	40.00
2 supply pitchers at separator at	16.00
1 separator man	8.00
5 grain haulers, team and man at \$11	55.00
1 water man and team	11.00
1 engineer	10.00
Coal	18.00

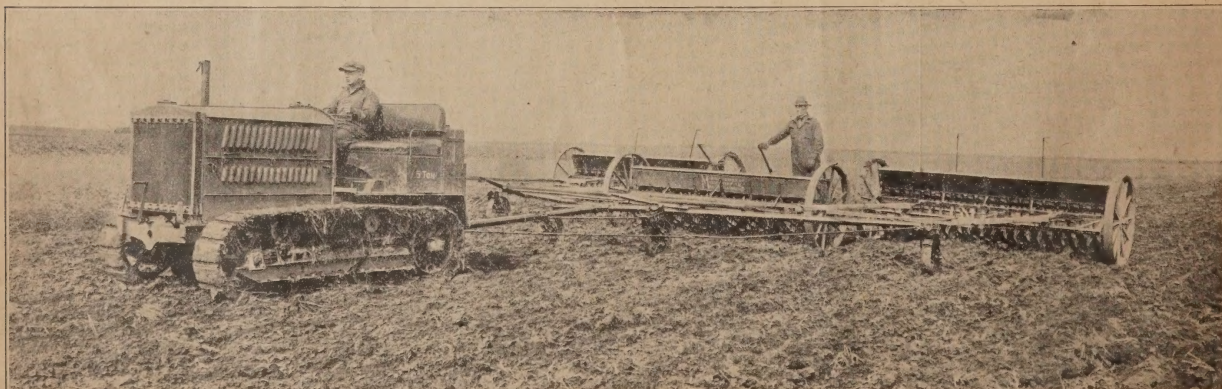
Total cost per day

Saving expense per day, \$159.20.

If I can give you any further information please write me.

Can it be that Canadian citizens are profiteering more by the advice of the Bureau of Markets, United States Department of Agriculture, regarding the marketing of eggs than our own people for whose benefit that advice is intended?

Because of the superiority of Canadian eggs, due to grading, packing and shipping methods similar to those advocated by the Bureau of Markets, Canadian eggs sell for 3 to 17 cents higher in British markets than American eggs.



Five Ton Caterpillar Tractor Pulling Three Drills and Seeders in the Field.

The Best Known Man in Cloverland— Marshall Burns Lloyd

By ROGER M. ANDREWS

THE best known man in Cloverland is Marshall Burns Lloyd of Menominee, Mich., the inventor whose crowning achievements are today so widely read about and so much discussed.

His life-long struggles were rewarded early in 1920 by the exchange of his great Michigan interests and Menominee plant with the Heywood-Wakefield Company of Boston for \$3,000,000 of stock in the big Eastern concern.

Thus was brought together the Heywood-Wakefield group, comprising the largest chair factories in America, with a successful business record covering ninety-six years, and Mr. Lloyd, the man whose genius has revolutionized the wicker weaving industry of the world.

Today there is a nationwide demand from the public for furniture and baby carriages made by the sterling processes of the Lloyd looms, costing less, wearing longer, finer in appearance and the last word in comfort, equipment and utility.

It was in 1918 that Mr. Lloyd brought forth his remarkable inventions whereby woven baby carriages and furniture are produced thirty times faster and better than is possible by hand. Previous to this he had revolutionized the wire bed spring and thin gauged steel tubing industries by his inventive genius. Since 1918 his Menominee factory has grown to be the largest baby carriage factory in the nation. It was this remarkable growth that attracted the attention of and resulted in the merger of the two corporations.

The Heywood-Wakefield Company is a thirteen million dollar corporation, having factories and warehouses in many of the larger cities in the United States.

Once a humble fish peddler—today a prominent inventor, a great manufacturer and a wealthy man—such is the broad expanse of life covered by Marshall Burns Lloyd, a man who refused \$1,000,000 in cold cash for two inventions with which he has revolutionized the wicker weaving industry and which—more important than all else—he released a vast amount of hand labor and permitted the articles to be woven by machinery 30 times faster than by hand and at much less cost.

This is the third great manufacturing industry which has been turned topsy-turvy through inventions of this mechanical genius. Little has been printed about him, but less than 25 years ago he brought forth a wire coiling device which, of bed springs, door, mats and other woven wire articles, speeded up the manufacture of bed springs, door, mats and other woven wire articles. A few years later he found the secret of manufacturing thin gauged steel tubing at prices so ridiculously lower than customary that the Steel Corporation has paid several hundred thousand dollars for the inventions. Just recently, Mr. Lloyd added the third revolutionary invention to his list by producing a new method and loom for manufacturing wicker articles, the method being the only change in the art of wicker weaving since the days of Adam and Eve and the loom, being so effective, that it performs, through the aid of one unskilled attendant, as much work as thirty skilled weavers can.

Marshall Lloyd's early days were anything but indicative or conducive to a later life of prominence, power and wealth. When a mere lad he was compelled to give up school in order to help earn the family bread. This he did by peddling fish about the village of Meaford, Ontario, in a wheelbarrow. During his rest periods, he played with mechanical contrivances, one being a clothes hamper which he produced in large quantities and traded for food and clothing.

The restless mind of the youthful inventor carried him out into the world always with the hope of producing a great invention and securing sufficient financial backing so that he might reach the place he holds today. Mr. Lloyd's school experience was a hard one and was not destined to be productive of wealth and power without trials and tribulations. In Toronto he was but a mere street hawker of cheap jewelry and soap; in Winnipeg he was a hotel waiter and land speculator; in Port Arthur he was a mail carrier with a dog train; in North Dakota he was a farm hand, and insurance agent and a small manufacturer. His first real manufacturing experience came through his invention of a combined scale and bag holder so that one man instead of two might fill and weigh sacks of wheat.

His wire coiling invention came within a few years and was leased to bed spring manufacturers of America, thereby producing enough capital so that the inventor could go farther in his mechanical research work. In 1905 Mr. Lloyd invented a wire wheel for children's vehicles; and though this is not one of his three greatest productions, yet it proved to be the one which drew him into the manufacture of children's vehicles, thereby turning his mind to machinery needed in the work and resulting in his two greatest inventions.

Lack of capital, and refusal of Minneapolis financiers to back him, made it necessary for Mr. Lloyd to continue his search for money. Just at that time Menominee, Michigan, was fading into the Sleepy Hollow state as a result of the dying lumber in-



Marshall Burns Lloyd of Menominee.

dustry. The latter, however, left in its wake many moneyed men who were anxious to find new industries to replace the lost ones. In some manner, Mr. Lloyd heard of the capitalists and the capitalists heard of Mr. Lloyd. They merged money and ideas, and Mr. Lloyd came here.

In 1920 he brought forth his new method and machinery for making thin gauged steel tubing. His factory was consuming large volumes of thin tubing but the price was almost prohibitive because, although it used less material to produce it, yet it required much more labor and thereby cost more per foot than heavy tubing.

When Mr. Lloyd found that he could weld steel ribbon by the oxyacetylene method into seamless tubing he hastened to Pittsburgh to secure additional backing from the steel magnates of the country. He was dismissed from their offices after a short interview and denounced as insane. Returning to Menominee he secured additional backing and finally perfected his machinery. Up until today, the men who called him insane have paid many thousands of dollars for the right to use his inventions.

Mr. Lloyd was then on easy street financially but his mind was not ready to quit. A shortage of labor in his wicker weaving plant and a general dissatisfaction over the slow work of hand wicker-weavers urged Mr. Lloyd to plunge into new mysteries. Wicker weaving is one of the oldest arts in the world. Biblical data proves that Adam and Eve wove their first clothing of wicker; that Moses was found in a wicker woven basket and that the earliest man interwove the roof of his house by a weaving method exactly like that used in making baskets, furniture and baby carriages.

Slow and imperfect weaving by hand has greatly hindered progress in the wicker line. Mr. Lloyd was not satisfied with the old method and went in search of a cure. He had heard of other inventors vainly trying to build looms which would weave wickers and profited by their failures. He soon saw that machine weaving was impossible under the old method of building the frame, attaching the weft to it and interlacing the warp. Hence, he began to hunt for a new method. This came when he saw the possibility of simply weaving the wicker and making the frame independent of each other and later attaching the one to the other. Although very been of tremendous importance and it alone has made weaving by machine possible. Then came the loom—the only loom ever made which would weave articles of irregular contour.

This new weaving machine operating under the Lloyd method, is capable of weaving a baby carriage body of irregular contour in less than fifteen minutes. An expert hand weaver using the same size wicker would require a day to perform the same work and even then his product would not be as smooth and uniform as that of the loom. The same comparison of men and machine weaving ability holds just as true of furniture and baskets as for baby vehicles.

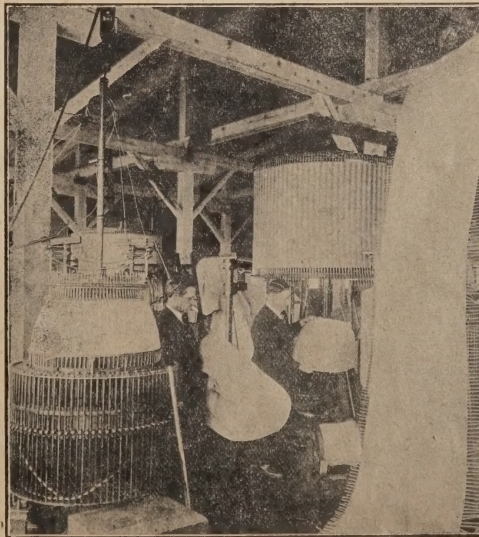
Shortly after Mr. Lloyd's invention was announced, he was offered \$1,000,000 for the American rights. He refused the money with the statement that he had spent three-score years with the one purpose of some day heading an immense corporation and that such an amount of money would not attract him from that purpose. He has since sold Great Britain, Australia, Canada and New Zealand rights.

Only twice after actually getting into an inventive career has Mr. Lloyd digressed from his path. While living in Minneapolis he "took a whirl" at politics by representing the Ninth Ward in the city council from 1896 to 1900. Again in Menominee and just before producing his wicker weaving invention he entered politics, this time to be mayor of the city for two terms. These were "vacations which cleared up his brain for real productive work," he said. During both of these political periods he sponsored municipal reforms.

Last summer while motoring to his old home at Meaford, Mr. Lloyd stopped at a farm house near the village for a drink of water. Upon entering the kitchen he saw in actual service one of the clothes hampers which he invented nearly a half century ago which he distinctly remembered as having been traded for a side of bacon.

So remarkable has been the achievements of Mr. Lloyd that scarcely had his invention become known before the prominent technical journals, newspapers, magazines and even the Encyclopedia Americana were printing a great many articles concerning the Michigan inventor. So numerous have been these articles that Mr. Lloyd is today one of the best known inventors in America.

"It was concentration of thought along a practical line until effective ideas were produced," said Mr. Lloyd, in analyzing his own success. "I early found I had a brain which would produce new ideas and I set out to use it. I spent years and years in just solid thinking, and results followed. That's all there is to it. Just thought—the mightiest agent in the world for good or bad."



The Famous Lloyd Loom Has Worked Wonders

#

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Fine Community Spirit of the Land Clearing "County Seat"

By LEO PATRICK COOK

"ROME was not built in a day." This is a favorite excuse for procrastination.

But somehow or other it carries a lot of truth. No community ever was built in a day and a community spirit takes even longer to build. The first faint glimmering of the real

lack has actually hampered the growth of one of the most promising towns of Upper Wisconsin, a district that is full of promise, because of its agricultural potentialities.

Wausaukee gained no little well-deserved fame when it so successfully contributed its share to the Marinette County Land Clearing Association's



The 1920 Entire Acre Blast After the Explosion.

community spirit begins to twinkle when the community for the first time gets together and does something that is unselfish.

I think that Wausaukee, "The land clearing county seat" of Marinette County, Wisconsin, is beginning to build up a community spirit, something it has lacked. I think that this

celebration in October. Its contribution was spontaneous, a heartfelt desire of all the people of the community to show that they appreciated the possibilities in the land clearing campaign. I think that Wausaukee has begun to grow in body and in spirit.

Wausaukee used to be a lumber town, a sawmill town, a "lumberjack



DAIRY FARMS

suffered least from the deflation. When the bottom fell out of the grain market, the prices on dairy products remained fairly stable. With cheap feeds the dairy farmer did not feel the shrinking values like the grain farmer. The diversified farming as carried on in OCONTO COUNTY, absorbs the shock of violent price fluctuations which wreck single crop farmers.

Oconto County marketed last year, \$3,000,000 worth of dairy products, and this was done on comparatively cheap land.

Improved, partly improved farms and cut-over lands can be bought in Oconto County for reasonable prices.

The Agricultural Committee

ROBT. AMUNDSON, County Agent, Oconto, Wisconsin



Bird's Eye View of the Thriving Little Town of Wausaukee, Marinette County, Wisconsin.

town." And before I go any farther with the discussion of the building up of the community spirit in Wausaukee let me interpolate a little early history. In making up this article I have drawn freely upon the memory and the friendliness of George E. Bogrand, editor and publisher of the Wausaukee Independent.

The first substantial residence was built in Wausaukee in 1884. It was the home of John Monroe, a hunter, lumberman and a hotel-keeper. His home "The Log Cabin" still stands and still is operated by his daughters as a hotel.

The village was platted in 1886, and there have been many additions. Wausaukee that year was made the site of a sawmill by Beach & Bishop, which concern was succeeded by various companies operating more extensive mills, until the last operator

in the village was the J. W. Wells Company.

The first effort to develop a civic center and civic pride in Wausaukee was made by Senator H. P. Bird, at that time head of the sawmill operations. In 1902 Senator Bird built a public library. It was plentifully stocked with books, had a public reading room, a restaurant and a bowling alley. The intention was to draw the mill employees and the visiting lumberjacks from the pleasures that were believed to attract them only because there were no other attractions. The senator was a few years before his time.

The library was abandoned ten years ago. The books were turned over to the high school and Mr. Bird sold the building to George E. Bogrand. It is now the home of the Independent. It might as well be said here that a few years ago the

school burned and with it the books, thus closing forever the public library chapter.

When the question of entertaining the visitors of the land clearing celebration day was broached the business men of Wausaukee revived the moribund Wausaukee Development Club and raised funds. The club notified the Wausaukee Women's Club it was expected to prepare to feed any number of visitors, to proceed on that theory without thought of expense. The women proceeded in just that way, served a luncheon that won warm praise, and the development club paid the bills without question or quibble.

It is now more than seven years since the J. W. Wells Company decided to suspend milling operations at Wausaukee and to move the plant to Menominee. Gloom settled over Wausaukee. It was thought that

Wausaukee's sun had set. Without the sawmill its merchants would have no business, grass would grow in the streets and Wausaukee would be another "Sweet Auburn."

There might have been a wholesale hegira had not some of the far seeing men of the community allayed the excitement by recalling to the faint hearted the fact that as the lumbering industry was dying there was building up around Wausaukee a farming industry that was bound to mean more in business than the lumbering industry ever could create. The faint hearted decided to hang on and see. Wausaukee is today a better town than it ever was and is one of the best arguments I can think of in support of the contention that there is a wonderful agricultural future for all of this former timbered region of the Great Lakes, call it "Cloverland" or what you will.

International Hay Machines speed up hay harvest

THERE are two big reasons why it is desirable to speed up hay harvest—the cost of labor and the pressure of other work. The quickest and most economical way to speed up haying is to employ efficient time and labor-saving machines.

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International sweep rakes and stackers are big time and labor savers especially suited to large acreages.



International hay presses multiply hay profit by putting the hay in the most economical shape to handle, haul, feed and store. The smooth, tight, neat appearing bales from an International hay press bring the highest market price. See the International dealer.

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Opportunity is Here

The 1920 U. S. census shows that more than 50 per cent of the increase in agricultural development in the United States between 1900 and 1920 was in that Greater Cloverland section of which the Upper Peninsula of Michigan is the center.

Prospective new settlers and farmers in this "Garden of Opportunity" may obtain free for the asking information and accurate descriptive literature by writing at once to

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What Our Telephone Service Means

Americans have almost grown accustomed to finding fault with their public utilities, regardless of the basis for this attitude. They pick flaws in the heating or lighting service; the transportation companies are criticised and the telephone is almost universally condemned. All of those utilities could be improved, it must be admitted, and the companies themselves make no claims to one hundred per cent efficiency. Most of them are functioning, however, and the majority have ridden the storm of adverse war period conditions in a fairly satisfactory manner.

The telephone offers a fair example of the highly developed public utility which reaches into countless thousands of homes and business houses and probably is condemned from Maine to the Golden Gate. While nervous America is frantically jiggling the hook and consigning "central" to blazes, Europe looks upon this country as a telephonic paradise and marvels at the speed and accuracy prevailing on our side of the Atlantic. It is doubtful if the average man stops to realize the vast amount of business transacted over the telephone which formerly required a letter, telegram or a personal visit. The larger the city the greater dependence upon this method of communication and with the development of the long distance service it has become a common practice to conduct by telephone a business deal half way across the continent.

A fair appreciation of the American telephone can be had by learning of conditions in other countries where the system has not been developed to a degree comparable with the efficiency now prevalent in the United States. A correspondent of the London Times visited this country last year to study the telephone system for the purpose of writing a series of articles for his paper. He was struck by the number of telephones in use on every side. "What is so remarkable to the overseas investigator," he says, "is that not only does he find a telephone in every room and on every desk, but the telephone actually works."

The writer calls attention to a number of calls he made from New York to various suburbs in which he obtained his party in approximately a minute. Struck with this speed he goes on to say:

This extraordinary rapid suburban telephone service seems like magic to the visitor from England. The long distance service proper is very little less rapid between important cities. The delay between New York and Philadelphia, Boston, Washington and Chicago rarely reaches ten minutes and a larger proportion of such calls is completed in three to five minutes. The postoffice has had a monopoly of long-distance telephony in Great Britain for twenty-five years and has not yet learned that when a call is long delayed its purpose is often gone altogether. The preliminaries of a "trunk" called in England takes longer than the whole operation of a suburban call in America.

The correspondent was also struck with the great amount of systematic research carried on to increase the efficiency of the telephone and to extend its range of usefulness. Far from preaching Plumb plans for more utilities than railroads, he congratulates America on her good fortune in escaping a government monopoly on the telegraph and later the telephone and he ascribes the latter's remarkable growth from one million stations in 1900 to twelve millions in 1920 to the advantage of private enterprises. State control in England, he asserts, has reduced the value of the telephone to the British public by about 80 per cent. As to the economy of the American telephone he says:

It is not surprising to find when an industry is developed with such high technical efficiency and such thorough commercial organization, that it exhibits economy as well as efficiency, not only is the telephone immensely more efficient in America than in Great Britain—more speedy, more accurate, more reliable, more generally available and serviceable—but it is more economical. The actual average revenue per telephone, notwithstanding the higher working costs, is lower in America than it is in Great Britain. Which is another illustration of the fact, well known to engineers but not to bureaucrats and politicians, that high efficiency goes linked with economy.

With this outspoken praise of the American telephone from a foreigner it might be well for the American to recall his good fortune occasionally rather than to complain continually of the service of every public utility.

Scrubs Not Welcome

SUCH might be the heading of announcements made today by state leaders of cowtesting associations in the state, which point to the passing of the scrub in the 115 associations in Wisconsin. Where 18 months ago only four per cent of the associations had purchased bulls, only 48 of them, or almost 42 per cent are 100 per cent free from scrub sires at present. A survey of 68 of the cowtesting organizations shows that 71 per cent of the 2,051 members use pure bred bulls, leaving only 147 sires still to be replaced by purebreds, according to the three state leaders, A. J. Cramer, College of Agriculture, H. C. Charles, Fond du Lac, and Erwin Sutton, Augusta. The cowtesting associations of the state are cooperating actively with the Wisconsin Live Stock Breeders' Association and the College of Agriculture to "swat the scrub."

"Within the 68 associations," said Mr. Cramer, "1482 cows were sold as unprofitable stock after the tests had proven to their owners that they were not worth keeping. Exactly 363 scrub bulls were replaced with pure bred during the year in the same associations. Some 432 herds were tested for tuberculosis, and the average increase in production for the year due to culling the unprofitable stock and better feeding methods was 14 per cent. A large number of the cowtesters have also been instructed by their associations to buy feed cooper-

atively, and as a result, 86 associations bought 82 carloads of 2053 tons of concentrated feed, representing a considerable saving over the preceding year's prices."

During the past few years a Wisconsin Register of Production has been in operation to register cows that produce a pound of butter a day or 365 pounds in a year. Over 700 cows have already been registered, and according to Mr. Cramer at least 1,000 more might qualify. During the past year some 83 breeders took up Advanced Registry testing, which is under the direction of R. T. Harris, College of Agriculture.

"There is still a demand for good trained testers," says Mr. Cramer. "We have a special training course for testers in connection with the Short Course in Agriculture, and besides these there is an opportunity for graduates of the regular short course to qualify for positions as testers. The first of three terms of the short course began November 8, and the next opportunity for men to enter the course will be on January 3, when the second term begins. Associations have found in general that the best way of financing their organization is to use the per day plan, by which \$3.50 to \$4 a day is paid to the secretary. About 90 per cent of the associations in Wisconsin are financed in this way. The other plan, which is not as good is to charge \$2 to \$2.50 for each cow during the association year."

Sunflowers for Silage Use

By HALSTEAD WORTH

One of the greatest problems of the live-stock operator and farmer, in the summer range districts of the Northwest has been the subject of winter feeding, and, though numerous experiments have been tried out in an effort to solve the situation, it was not until this winter that those engaged in the work felt sufficiently confident to make any definite announcement. Now, however, we are told that the Upper Peninsula Experiment Station, at Chatham, Michigan—a branch of the Michigan State Agricultural College—has determined the marked superiority of sunflowers, over beets, oats, corn and other silage crops, for winter feeding, and, consequently, farmers and stock runners of the Northwest district are speculating in sunflower seed for spring planting.

Early in the spring of 1920 a seven-acre plot was seeded to sunflowers, under the direction of D. L. McMillan, superintendent. The test plot was given careful attention, and a week later saw the sprouts reaching up and squaring away for a healthy growth. The plant thrived and rapidly until, at the time of cutting, it had reached an average height of about eight feet, with heavy thick stalks, wide leaves, and great yellow heads eight inches or more in diameter.

The plant yielded 24.6 tons to the

out-stripped the lambs in weight and appearance. That sunflowers contain a decidedly nourishing substance is not questioned by the authorities at the station where these tests were first tried out. Not only that, they declare, but sunflowers, fed in less amount than any other type of silage, produces better results where the animals show a liking for it. Mr. McMillan estimates that the sunflowers now in the silo are sufficient to feed his dairy herd of twenty Holsteins and all of the ewes for the rest of the winter.

Another interesting experiment—though conducted quite accidentally—was carried out with sweet clover. A part of a band of sheep, breaking out of the feeding corral, wandered into a field of annual sweet clover and, when discovered later, they were digging away at the tender sprouts as though actually eager to "take on" as much feed as possible before being discovered. Later, when six inches of snow covered the same field, the sheep were turned in; as an experiment, and the entire flock, scenting the clover beneath, immediately began digging down for the roots. Consequently, further tests will be carried out with annual and semi-annual sweet clover this spring, to determine its field value as compared with other kinds of winter feed.

Just at present, however, the ex-



acre, as compared with eight, nine and eleven tons for oats, beets and corn, respectively, grown on an adjacent plot, and receiving the same amount of care. Thus, approximately 175 tons of sunflowers were hauled to the silo, cut into one-inch bits and packed tight, no other products having been mixed with them. When the fermenting process had been completed, the experiment was begun, first on cattle.

Holsteins which received forty pounds a day thrived rapidly, and took on weight. Milk and butter fat showed a decided increase and the silky gloss to the hide, the rounded udders and healthy calves were striking evidence of the success of sunflowers for winter feed.

This much having been definitely established, the same experiment was begun on the sheep and lambs. The ewes waded into the juicy feed with a will, eating it clean and leaving not a scrap. The lambs, however, held back, though they seemed to sample it from time to time, did not take to it heartily. It was found that the lambs would turn aside the sunflowers for turnips or rutabagas.

The ewes, however, stuck to the sunflowers, in preference to any other feed, with the result that they soon

perment station officials are emphasizing the high value of sunflowers for silage, believing that therein lies at least a partial solution of the winter feed problem for the northwestern farmers and grazers. It was also determined that sunflowers show a much greater resistance to frost than corn, or other silage crops, which, again, places the sunflower to the fore as a middle-western feed crop. And, lastly, the fact that sunflowers will produce approximately three times the tonnage of corn—the latter a stable silage crop for years—has brought forcibly to the attention of the northwest farmer the decided advantage of the former, as applied to the growing conditions in the middle-western region.

Further tests will be carried out this spring, and it is confidently expected that next fall and winter will establish, beyond a doubt, the fact that sunflowers for silage is one of the most valuable and economical features which the middle-westerner can emphasize today. Already there is a marked tendency toward the increased cultivation of the plant, and it is believed that the coming season will find sunflowers thriving on most of the up-to-date farms throughout the region.



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Prices:

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Terms are reasonable

Write me for definite quotations, maps, etc.

J. M. LONGYEAR
MARQUETTE, MICHIGAN

Thunder Mountain Ranch

By G. L. NOBLE

THE cut-over country of Northern Wisconsin, Michigan and Minnesota will in a few years be one of the outstanding livestock producing areas in the Central West.

This statement is made with the knowledge that not a few people, and among them some of the well known

used that the soil on these lands is not adaptable, the task is too stupendous, and that there are other territories which will yield quicker returns for the capital expended.

It is not claimed that every forty, nor every section, nor even every county in the vast Cloverland territory is adaptable to cultivated crops and



These companies were the first to bring cattle to cut-over lands, and carry on profitable and successful grazing in Cloverland.

WE offer the western grazers their choice of 75,000 acres of cut-over lands in Cloverland; 25,000 in Northern Michigan; 50,000 in Florence and Forest Counties, Wisconsin.

Several ranches were selected and taken over last year by well-known western cattle and sheep men.

Write us for particulars or come and see these lands for yourselves.

J. W. WELLS LUMBER CO.
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DUNBAR, WIS. MENOMINEE, MICH.



Buckwheat Field in Full Bloom at Thunder Mountain.

agriculturalists, believe that most of the land which was originally covered with forests should be utilized principally for tree production and that mere man should not attempt to subdue the forest primeval in order to produce crops that will satisfy his hunger and supply his bodily needs. It is not the intention here to advocate the cultivation of all cut-over lands. Doubtless there are thousands of acres which should be re-forested and handled in a scientific way by our Government. It is the lands which can be profitably cultivated which we desire to discuss. The argument is

livestock production, but a large proportion of it is. True, this transformation requires time and capital. To the settler with little equipment who must depend on hard work the task is an arduous one. But with working capital and business methods rapid development can and is taking place.

As an example of what is being done, one need go no further than a certain ranch in the western part of Marinette County in Upper Wisconsin which bears the impression and almost superstitious name of "Thunder Mountain." This name makes one hark back to Washington Irving's story of

Who Will Divide Your Estate?

Some day your estate will be divided. At that time one of two things will happen.

Either the division will be according to the terms of a will which you have made,

—or the division will be according to state inheritance laws which may or may not fit your family's needs.

It is your duty to your family to make a will now; it is your duty and privilege to name a thoroughly responsible executor in that will.

A trust company is the best executor for, unlike an individual executor, it never dies—never falls sick—never falls from lack of experience.

The Union Trust Company adds its 30 years of experience to the many good points of a trust company as executor.

It will do for your family what it has done for hundreds of others—it will see that the terms of your will are faithfully and effectively carried out.

A phone call or a letter will bring literature which you will find most useful in solving your problems.

Union Trust Company

First Trust Company in Detroit

DETROIT, MICHIGAN

Rip Van Winkle who dreamed of the funny men in the Catskill playing at ten pins, the sound of which reverberated again and again, giving the impression of distant thunder. "Thunder Mountain" ranch, however, is no dream, but is a real, practical farm business which is thundering out to the farmers of the whole region the value of up-to-date methods, crop rotation, well bred livestock and accurate farming records.

Two thousand acres, three hundred of which are cleared, comprise the estate which is bounded on the east and west by the Handsaw Creek and on the county line, and on the north by the Peshigo River and the south by Thunder Creek. It reminds one of an experiment station on a small scale, for indeed they are trying out various crops and practices to be sure of the most profitable course to pursue. Oats yields an average of 24 to 25 bushels per acre; corn of the Wisconsin 25 variety, yields 45 bushels; buckwheat does well; alfalfa on inoculated ground yields about a ton the first year and gives promise of adapting itself and giving large yields; potatoes have yielded 120 bushels per acre. Of course it is expected that these yields will increase as the various crops adapt themselves to the new soil conditions.

Nelson Buck, the proprietor, who with his good advisor, L. P. Bauman, who is a graduate from the Agricultural department of the University of Illinois and a specialist in soil fertility, realized, however, that the ranch must have livestock in order to profitably market its crops and maintain and build up its soil fertility. At the present time a large number of beef cattle are on feed, the ration used being corn ensilage, cottonseed meal and clover hay. A start has been made with purebred dairy cattle, the Guernsey breed having been chosen. A purebred bull—Reynold Kirkwood and a cow—Belle of Prairie Ranch—were purchased at the recent Fond du Lac sale as a start in this direction. Yorkshire and Poland China swine are the two breeds of porkers making a name in this region. The Poland China sire is Big Buster which with a few sows was purchased at the Wm. Wrigley sale last year, which averaged \$1,250 per head. Big Buster is the famous son of the Clansman, Mr.

Wrigley's \$50,000 herd boar. Mr. Buck has realized, too, that good farming demands good buildings to house his livestock during severe weather and to properly house his machinery. A complete plan, well thought out, is being followed to take care of these various enterprises as they develop and one which when completed will completely care for the ranch without modification, shifting, or any changing whatsoever.

Farmers in the whole region are taking an active interest in the progress being made and go frequently to "Thunder Mountain" ranch for advice. Presumably one of the chief reasons for this interest is the fact that "Thunder Mountain" ranch is being run on a strictly commercial basis. It is no rich man's forest preserve but one which expects to pay a good rate of interest on the investment. While it is necessary now to reinvest the earnings in the further clearing of land, each year sees just that many more acres capable of bringing in an added income. The possibilities of the region as demonstrated at "Thunder Mountain" ranch not only have attracted the local settler but outside parties are evidencing keen interest in the development. Last October V. H. Munnecke, manager of the Dressed Beef Department of Armour and Company, Chicago, was a visitor during a trip which he made to survey the cattle producing possibilities of the territory. C. A. Brewer, a recent visitor who is also a manufacturer and capitalist, was loud in his praise of what was being accomplished.

Going back to the opening statement, namely, that this region will eventually be one of the great live stock producing sections, no further proof is needed than a visit to "Thunder Mountain" ranch. With ample markets near at hand and with such productive land at such reasonable prices available there is every reason to believe that the North country will develop very rapidly indeed within the next few years. And who will say that it is not worth while? For such a visit to the beautiful and productive farms of lower Ontario which fifty years ago were a maze of forests may serve as a means for broadening one's vision. "Thunder Mountain" ranch and its management is to be congratulated for the advancement of agricultural prosperity of the district.

Junior Live Stock Teams

JUNIOR live stock judging teams, to represent Minnesota at the National Dairy and the International Live Stock shows, will be chosen hereafter at the state fair rather than late in the fall at a contest at University Farm.

This change, recently made by the state leaders at University Farm, will do away with the handicap under which Minnesota junior teams have taken part in national and international contests. Minnesota's boy and girl judges have been chosen heretofore only a few days before they were to appear in the big Chicago competition. Generally they were strangers to each other; there was no time for systematic coaching or the teaching of real team work.

This handicap became apparent as never before at the recent International in Chicago. Minnesota was placed well down on the list in that contest, chiefly, there is every reason to believe, because it had no opportunity to drill in the few days between the state contest and the larger one at Chicago.

The state leaders have also made another important change, namely, the creation of two classes for participation in dairy and general live stock judging. Class A will be for juniors from 14 to 19 years of age, who have had 30 days or more (at the time of the state contest) instruction under the direction of a regular instructor of agriculture in a graded, consolidated or high school of the state. Class B will be for juniors 12 to 19 years of age who have had no such in-

struction, or less than 30 days, at the time of the state contest.

County judging work must be organized not later than April 1, 1921, and county contests must be held not later than September 1, 1921. To be eligible for the state competition, a county must have at least ten members enrolled. The member receiving the highest score in each of the classes shall represent the county in the state contest. If only one class is represented in a county, the two highest members may be sent to the state contest provided that at least two groups or clubs are represented.

The three juniors receiving the highest standing in the dairy stock and general live stock demonstration, respectively, in the contest at the state fair, irrespective of class representation, shall compose the state teams to represent Minnesota at the National Dairy Show or the International Live Stock Show.

SOLDERING.

Farmers have a great deal of soldering to do. Oftentimes when it is desired to mend something, it is found that the supply of soldering flux has been used up.

It is very easy to make a good flux by dissolving pieces of zinc in hydrochloric acid. The reaction forms a solution of zinc chloride. The formula? Just keep adding zinc to the acid until no more chemical action is observed.

The solution can be kept in a glass bottle and applied in the usual way.



Progressive farmers make their own fuel and light

THE Colt Carbide Lighting-and-Cooking Plant has given the farmer the means to enjoy city lighting and city cooking conveniences, available in no other form.

This simple machine mixes carbide and water to produce gas which has been declared by Science to be the hottest fuel known for cooking and ironing. It likewise produces light that is a perfect match for sunlight.

Crushed stone and water produce fuel and light

Carbide is often referred to as "crushed stone". That's just what it looks like. And, in itself, it is equally inert and harmless. It can be stored indefinitely with perfect safety.

The simple little Colt machine brings the carbide and water together automatically. An automatic shut-off control takes care of the supply, so that you pay for just what you use.

Here, then, is the ideal fuel and light for you. The Colt plant is easily installed. It requires but nominal attention, asking but little in return for the marvelous service it performs.

Make your place stand out from the surrounding farms. Give it the manifold advantages of a Colt Carbide Lighting-and-Cooking Plant.

Send us your name and address on a postal and we will tell you all about cost and everything else you want to know. Get the facts and let them decide for you.

J. B. COLT COMPANY

30 East 42d Street, New York



CARBIDE LIGHTING-
AND-COOKING PLANTS

C-2-21

The publishers of CLOVERLAND MAGAZINE guarantees the reliability of its advertisers for honesty and a square deal.

Shorthorn Prize Appropriations

Do you know that there will be near \$300,000 paid to Shorthorn exhibitors in 1921 in cash prizes? At the Illinois, Iowa, and Ohio State Fairs a total of \$40,000 about equally divided among them will be paid to Shorthorn exhibitors. Throughout the entire country where Shorthorns are produced a similar proportion in prize money will be distributed.

The farmers and ranchmen are recognizing now under present conditions more than ever before the actual dependable worth of the Shorthorn as a source of profit. Utility, adequate weight, quality, adaptability to the ordinary conditions and ability to thrive on the ordinary roughage are Shorthorn characteristics that the practical stockman recognizes.

It Pays to Grow Shorthorns.

American Shorthorn Breeders' Association

13 Dexter Park Ave., CHICAGO, ILL.

Potatoes—

MARKET YOURS NOW

While There Is Still a Chance
to Get Something for Them.

To realize the most money grade them to comply with U. S. Grade No. 1. Sack them 150 lbs. net in new sacks. Bill cars to us at Green Bay "For Diversion."

Quick Sales—Prompt Returns

Platten Produce Company GREEN BAY, WISCONSIN

Your Home Market

Gateway To Cloverland

We can furnish new sacks at cost.

ROSECO BRAND

Food Products

The Standard of Excellence in Greater
Cloverland



Follow the Sign of the Rose

ROACH & SEEBER CO.

Wholesale Grocers

CALUMET, MICH. MARQUETTE, MICH. HOUGHTON, MICH.
IRONWOOD, MICH. WATERLOO, WIS.

New Tires From Old Casings

By CLYDE E. TRACY

A FEW years ago, millions of dollars were annually wasted, practically thrown away, by the so-called standard tire manufacturers because of the manner in which they dispose of what are called "adjustment tires."

Adjustment tires are those casings on which an adjustment has been made by the manufacturer. This adjustment may have been occasioned by some defect in the tire or by abuse of the purchaser. In a great many instances, though, adjustment tires are those which are slightly worn, which are actually uninjured and on which a small allowance has been made as an inducement to wealthy customers to keep their cars equipped with new tires.

For a number of years these adjustment tires were sold as old rubber or junk and were an actual economic loss. No effort was made to select the good tires from the bad or to reclaim a portion of these tires.

In Akron, Ohio, working for a large rubber concern were two brothers, Nathan and Sam Bloomfield. They saw the tremendous waste which apparently was going to continue indefinitely and made up their minds to do their share toward stopping it. They had practical experience in the manufacture of tires and they had some money, the accumulated savings of several years. The Bloomfield brothers went to their employers and asked to be allowed to contract for all the "adjustment tires" which were to be sold that year. Their request was granted and they went to Chicago and started in business, calling themselves the Durable Tire and Rubber Company.

Soon a carload of "adjustment tires" came in. These they carefully sorted, keeping the tires that were only slightly used and reselling the balance as junk. The next step was the purchase of machinery and materials with which to rebuild the tires.

This finally disposed of the problem of how to dispose of their finished product presented itself. Right there an interesting factor was discovered.

The standard tire makers have a list price, which the consumer pays for a tire. Sometimes he gets a 5% discount but not often. The dealer from whom he buys his tire has a profit margin of about 30% and there is no question but what it costs the manufacturer at least 30% to sell the tires. In addition the manufacturer's overhead and profit consumes an additional amount variously estimated from 15% to 25%. Therefore at the very least 75% of the final cost represents items other than labor and materials. In other words if you pay \$40 for a tire you are buying an article that cost less than \$10 in labor and materials.

The Durable Tire and Rubber Company found themselves in a very advantageous position, due to the fact that the fabric and bead in their tires, the determining factor in tire costs, was secured very cheaply. They were able to sell a reliable article at a price that was far below that

of the new standard casings.

In order not to add a tremendous overhead and selling cost to their prices, they decided to sell their tires through the mail and three years of success have attested that their decision was a wise one.

Today the Durable Tire and Rubber Company plant is a revelation to one acquainted with the waste prevalent only a few years ago.

A carload of tires comes in. Four sorters start to work selecting the tires fit for rebuilding. The inside fabric and bead are carefully examined and if there is a suspicion of wear or weakness the tire is discarded to be sold as junk.

The selected tires then go to the stripper. In this operation great care must be exercised that, in peeling the old rubber from the side walls and tread, the fabric isn't cut. Once in a while one is cut but the inspector catches it before it goes to the buffer where the fabric is finished.

As soon as the tire is buffed, three coats of cement is applied and the tire is hung up until the cement is partially dry. While hanging it is again inspected.

Next the side walls are built up with para gum and two extra layers of fabric cemented on. Then the tread is put on and after another inspection the tire is put in the steam oven to be cured. This is the final operation in the actual manufacturing of the tire.

When the tire has been properly cured it is given its final inspection and sent to the wrapper, who winds around it the paper in which it is shipped. A section of about eight inches is left unwrapped, however, in order that the purchaser may actually see the tire before he pays for it.

Due to the demand for different styles of treads the Bloomfield brothers have recently started a new company called the Field Tire and Rubber Company. Their product is made in the same way as are Durable Tires and with the same careful inspection, the only difference being the style of the non-skid tread. Field Tires as well as Durable are guaranteed for 5,000 miles and that is an actual bona fide guarantee. It means that if for any reason, other than abuse by the purchaser, the tires fail to give the full mileage you will pay only for the service you get. In other words, if your tire gives only 2,500 miles' service, you get a new one for half the price.

The Durable and Field Tire Company do not sell stitched tires, that is two old tires sewed together. Stitching injures the fabric and renders the tire practically worthless in addition to injuring the tube through friction.

In going through the factory there is an atmosphere of sincerity in the work of every employee and in the office it is plain to see that the desire to make better tires is rewarded by increased business. But best of all the Bloomfield brothers have stopped the adjustment tire waste, and are saving money to the automobile owners.

GUARANTEED MILLER MADE TUBE FREE

16,000 Tires bought during the recent tire panic and now offered to you at greatly reduced prices.

This lot includes tires that are rebuilt throughout, slightly used cord and fabric tires and reconstructed tires that were guaranteed by the manufacturers for 5,000 miles.

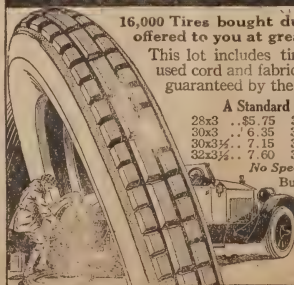
A Standard Make Tube Free with Each Tire Ordered

28x3	.. \$5.75	31x4	.. \$9.00	32x4 1/2	.. \$10.25	36x4 1/2	.. \$11.90
30x3 1/2	.. 6.50	32x4	.. 9.50	33x4 1/2	.. 10.50	38x4 1/2	.. 12.00
30x3 3/4	.. 7.15	33x4	.. 9.50	34x4 1/2	.. 10.70	35x5	.. 12.25
32x3 1/2	.. 7.60	34x4	.. 9.75	35x4 1/2	.. 11.40	37x5	.. 12.75

No Special Discounts to Dealers or Agents

Buy your summer tires now. Order today and save money. State straight side or clincher. Send \$2 deposit with your order and tire will be shipped balance C. O. D. Orders will be filled promptly until our limited supply is gone, so order today, before it is too late.

Chicago Tire Sales Company
73 Vincennes and 39th St. Chicago



Creating a Copper Market

By B. W. DONNELL

The bill to permit mining companies to manufacture articles from their output, framed by Representative Miller and introduced into the Michigan state legislature Monday, February 28, is looked upon by Upper Michigan's industrial interests—particularly the copper mining men—as one of the most vital issues pertaining to that region's economic progress that has ever been placed before the state's law-makers. The measure is designed "to afford relief from depression in the copper market such as now exists, and which has resulted in a sharp curtailment of operations in upper Michigan mines, and a surplus of 150,000,000 pounds of copper," according to the announcement of the issue, from Lansing.

"I know that generally sentiment is against permitting a corporation organized for one thing to engage in another business," declares Mr. Miller, in explaining the measure, "but something has to be done, as the condition is becoming serious.

Upper Michigan produces virgin copper. The mining cost is somewhat higher than with the one smelting mines of the west, and when lack of demand forces copper prices below a certain point, the Lake Superior copper companies have to quit.

"If the companies went into the manufacturing business in poor times, they could continue mining for a

shore line on the Great Lakes, its adequate and thorough system of railways and its 1,500 or more miles of macadamized trunk highways, reaching out to the main trunk lines of Wisconsin, Illinois, Minnesota and other middle-western sections, there is no shortage of channels through which to ship the finished product.

Upper Michigan, though a region of which comparatively little has been told, and learned, is rapidly coming into prominence for its unusual industrial features, and its increasing rate of economic progress. There is probably no more thorough, yet brief, survey of the region's achievements and possibilities than the reprint in a recent issue of the Michigan Republican, published at Lansing, of an article by Roger M. Andrews, published in 1916 in Cloverland Magazine.

The editorial forcibly brings to light a few of the reasons why upper Michigan considers herself adequately equipped to handle one more industrial feature—the manufacture of its own copper.

Here are some excerpts:

"The upper Peninsula has more wage earners than all the wage earners of the combined states of Wyoming, Nevada, South Dakota, North Dakota, Idaho, Arizona and Delaware.

"Nearly one-third of all the iron ore and approximately one-sixth of all the copper produced in the United



The Famous Portage Lake Canal Through the Copper Country of Cloverland.

somewhat longer period, as manufacturers by themselves would absorb a certain amount of loss in mining."

It is a fact that twenty-five copper mines in the state of Michigan are now closed down entirely, while those that are operating are running at about thirty per cent normal. It is a condition never before paralleled in Upper Michigan's "copper country,"—a region which, since the discovery of copper in 1834 up to the signing of the armistice had produced one-sixth of the nation's output of copper ore of the highest grade obtainable.

The question naturally arising from such a proposal is: Is Upper Michigan equipped to advantageously carry on the manufacture and sale of its raw product? Those who are now engaged in that industry: those of Upper Michigan's life-long residents who have closely followed the progress of copper mining and have made it a study, as well as expert engineers from outside the peninsula who have surveyed the situation and reported upon it, declare that the region is amply endowed, by nature, with the facilities which would make the manufacture of copper equipment an ideal industry for Upper Michigan.

As for railroads, waterways and highway transportation facilities, upper Michigan is more advantageously equipped, probably, than any other copper-producing region in the country. With its hundreds of miles of

States is mined in upper Michigan.

"The lumber products of the upper peninsula are equal to the lumber products of Wisconsin, Pennsylvania, California, Minnesota, Illinois or Mississippi.

"The upper peninsula has a thousand miles of coast line, and water power at Sault Ste. Marie second only to the great falls of Niagara.

"The upper peninsula has been a part of the state of Michigan since 1837—or 83 years, and since that far distant day, six Michigan men have been members of the cabinet of the President of the United States.

"There is not a city in Arizona, Nevada, New Mexico nor Wyoming as large as Escanaba, upper Michigan.

"There is not a city in Vermont, Wyoming, New Mexico, Nevada, Mississippi, Arizona, North Dakota or South Dakota as large as Calumet" (in upper Michigan's copper country.)

"The Upper Peninsula has more schools than Rhode Island, Delaware, Wyoming, Nevada, New Mexico, Arizona, or Utah, and spends more for these schools than is spent in New Hampshire, Rhode Island, Delaware, Wyoming, New Mexico, Arizona or Nevada.

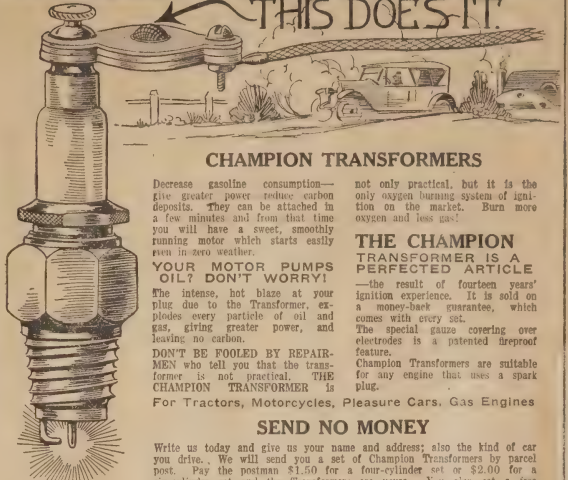
"In these public schools of the upper peninsula there are more pupils enrolled than in Delaware, Wyoming, New Mexico, Arizona or Nevada.

"The upper peninsula pays a larger

(Continued on page 20)

YOUR TROUBLES ARE OVER

THIS DOES IT



CHAMPION TRANSFORMERS

Decrease gasoline consumption—give greater power—reduce carbon deposits. They can be attached in a few minutes and from that time you will have a sweet, smoothly running motor which starts easily even in wet weather.

YOUR MOTOR PUMPS OIL? DON'T WORRY!

The intense, hot blaze at your plug due to the Transformer, explodes every particle of oil and gas, giving greater power, and leaving no carbon.

DON'T BE FOOLED BY REPAIR-MEN who tell you that the transformer is not practical. THE CHAMPION TRANSFORMER is

not only practical, but it is the only oxygen burning system of ignition on the market. Burn more oxygen and less gas!

THE CHAMPION TRANSFORMER IS A PERFECTED ARTICLE

—the result of fourteen years' ignition experience. It is sold on a money-back guarantee, which comes with every set.

The special gauze covering over electrodes is a patented fireproof feature.

Champion Transformers are suitable for any engine that uses a spark plug.

For Tractors, Motorcycles, Pleasure Cars, Gas Engines

SEND NO MONEY

Write us today and give us your name and address; also the kind of car you drive. We will send you a set of Champion Transformers by parcel post. Pay the postman \$1.50 for a four-cylinder set or \$2.00 for a six-cylinder set and the Transformers are yours. You also get a free booklet written by ignition experts which alone will save your usual Spring repair bills.

VAN KERR CO., Dept. AL, 139 N. Clark St., Chicago
Over 100,000 satisfied customers are using Champion Transformers

STEADY AND ASSURED POWER

No matter how skillful a driver you may be, to obtain the best results from your car, you must use a gasoline with a correct range of boiling point fractions. A gasoline which will give all the power your engine is capable of developing.

RED CROWN GASOLINE

Is Steady and Sure

POLARINE

Seals Pistons Against Loss of Power

One of the four grades of Polarine Oil will enable you to conserve and use all the power your engine will develop. Polarine seals pistons and minimizes carbon.

We recommend their use in every make and type of car.

Ask any Standard Oil agent or representative to show you the chart on which is given our recommendations as to the correct grade of Polarine to use in your car.

STANDARD OIL COMPANY

CHICAGO

(Indiana)

U. S. A.

VON PLATEN-FOX LUMBER CO.

MANUFACTURERS OF

NORTHERN HARDWOOD

IRON MOUNTAIN, MICH.



*Keep closer to
your friends*

Are you letting those you care for drift away from you?

That girl or boy at college. That chum in a nearby town. That relative.

Distance is no excuse for neglecting them.

Although perhaps you cannot visit them frequently, you still have an intimate and convenient means of communication.

Long Distance Telephone Service brings them as near to you as your telephone.

Connections with state towns are a matter of minutes; then you are all ready for a good heart to heart visit.

Speak in a low ordinary tone; conversation can be heard distinctly.

There is no need for neglecting acquaintances in other towns these days.

Keep close to your friends. Show them that you care.

Make the ring of the Long Distance Telephone your "calling card."

MICHIGAN STATE



TELEPHONE CO.

"Our Ambition—Ideal Telephone Service for Michigan"

Cuba and its Problems

By DANIEL WELLS

CUBA is in a mess. Her house, the green-house of the West Indies, had been in order a long time. It looks like a man's job down there for some one.

Some radicals advocate United States calling it a mis-deal and "taking over" Cuba. This would be a national injustice. Don't do it, gentlemen, the American method is on trial before the world. Cuba should play out her hand alone. It took Spain twenty-five years to learn she couldn't "take her over."

Our own country, too, is in somewhat of a mess, considering the stagnation of all industry today. That we are staggering across the world's stage before the concert of powers, a headless nation. Our responsible executive head has disappeared from view, his name is but a shibboleth, a phantom, a byword. For many tragic months we have been powerless to remedy our national malady. The United States is a corporation whose manager is incompetent, and the board of directors is unable to remove him. In the meantime we wander aimlessly among the nations.

U. S. "Take Over" Mania.

In the past we have had panics in this country fully as bad as we see in Cuba today; we have managed to struggle through them all right. No one ever "took us over." There are some people who always want to "take over" something, they have a mania for owning things. Sometime they will feel like the man who tried to "take over" a bee's nest.

It would be a pity to admit to the world that all our effort with Cuba has come to naught. The Statue of Liberty might blush under her bronze skin and hold her candle less high. She might be heard to say: "How can I stand out here on this rock, in my bare feet, and tell the world I

stand for liberty? How can I do it?" We sent our soldiers to Cuba in '98 to rescue the Cubans from the rapacious maw of Spain; while cynical Europe looked on with glittering eyes and said: "The Americans are either out for a joy-ride or they have decided they need Cuba in their business."

When the Spaniard had been tumbled into the sea, we recalled our troops and coached Cuba along to self-government. Europe said: "There is nothing new over there; it is just a difference in method. Just watch, Cuba will soon be an American colony. They want her and they will get her. It has been the way of colonial wars since the Romans conquered Gaul. Just watch."

Cuba Gets Busy.

Ten years slid by, ten busy years in the regeneration of Cuba. She cleaned out her garbage pile and dusted house from top to bottom. She got out the old plough and ploughed up the garden the Spaniards had trampled over so long. She made the farm hands get to work. She did a great stroke of business. Europe looked on and sneered. It couldn't be, there was not a country on earth that would refuse that fabled little sugar raft anchored so conveniently in the blue Caribbean. If America would deny herself such an acquisition, laden with natural resources and potential wealth, she should have her head examined.

Fifteen, twenty busy years, since the occupation of Cuba traveled by, the only gesture made by Uncle Sam toward Cuba was one of counsel. Europe stood at last convinced. Here was a phenomenon in colonial history entirely outside their experience and vision. America was not taking over Cuba. She had meant what she

(Continued on page 22)

Linking the Continent



Two decades after the courtship of Capt. Miles Standish in Plymouth-town, French explorers "portaged" from the Fox to the Wisconsin and from Bois Brule to the St. Croix, reaching the Mississippi from the Great Lakes.

Thus were Quebec and New Orleans united and New France enabled to hold the interior until thirteen years after the "Minute Men" fired on the British at Lexington.

Wisconsin has long been strategic ground. Her metropolis, and the rich district served by it, have prospered through the bounty of nature and through leadership of First Wisconsin caliber.

**FIRST WISCONSIN
NATIONAL BANK
Milwaukee**

Ask Theodore—He Knows

A Potato Club Boy in Cloverland Shows
His Elders Some Fine Points

By L. D. TUCKER

STATE champion at 16. That is the singular honor which has fallen to young Theodore Stenson, of Covington, Upper Michigan. And in achieving that honor this boy has outrun some of the best potato growers in the state, and—yes—has even crowded his own "Dad" into oblivion.

Theodore puts it this way: "I joined the potato club last year (1918) because I felt it was my duty to do something to help win the war, and, as I live on a farm, growing something to help feed the big fighting men was the only thing I could think of." It was a happy thought for Theodore, and his sobriquet of "First-prize Teddy" is well earned.

Probably Theodore's most notable achievement is that of coaxing 95 bushels of tubers out of a scant half-acre of ground. This he accomplished during the season of 1919. The potatoes were exhibited at the Baraga County fair, in the open class, the same year competing against a good-sized delegation of much older and far more experienced farmers. Theodore carried off first honors. And the same award fell to him in the club exhibit. Aspiring to still higher honors, Theodore selected the best of the lot and shipped them to the Houghton County Fair, where he topped the list in the general class. And, as a crowning achievement for the year, the boy was awarded first place in the state, and proclaimed the state potato club champion, at the Junior Potato Show held during the Farmers' Week at the Michigan Agricultural College.

And again, last year, Theodore galloped off with first honors against all competitors—young and old (including his very own "Dad") at both the Baraga and Houghton counties fairs.

In his report for the year 1919 Theodore casually dashed off some facts which have made his be-whiskered and experienced rivals sit up and take notice. The particular plot of ground which produced the 95 bushels of potatoes, Theodore declares in his report, was 360 by 30 feet, consisting largely of clay loam with a top-soil of thirty inches, over hard sub-soil. The land had been worked for four years preceding Theodore's achievement,

he did not cut the seed, but rather selected whole potatoes of an average small size, planting them by hand at a depth of about six inches, with about two and one-half feet between the rows and sixteen inches between the hills in each row. The first sprouts were noticed on June 25.

During the year Theodore cultivated the lot four times, by the shallow cultivation process. But little damage



Ted in His "Work Shop"

was done by insects, Theodore seeing to this by constant attention to the "pesky" red-backs that persist in the best of plots. The potatoes matured on or about September 20 and were harvested September 25. Of the 95 bushels harvested 90 were of excellent size, and marketable.

Against a total expenditure of \$62.00



A Home-made Blaster's Box Saves Time and Trouble

IN using explosives on the farm only a few simple tools are required, but it is a great convenience to carry all equipment in a "blaster's box" where nothing will be mislaid or lost.

Such a box can be easily made from a soap or starch box. Nail a one inch strap on each side for a handle. Screw a strip of wood on one end, slotted to hold cap crimper and knife. In the box can be carried fuse, cord to tie fuse to cartridge, and dynamite. *Don't carry caps and dynamite together in the blaster's box.*

The most important tool in the blaster's box is the cap crimper—caps should always be crimped on the fuse with the crimper and nothing else. A sharp knife is necessary for slitting cartridges and cutting fuse.

Most farmers use



RED CROSS DYNAMITE

because it can always be depended upon to give quick and effective results at minimum cost. You can get it—fuse, caps and crimpers, too—from your dealer.

Write us for "The Farmers' Handbook of Explosives." It describes the latest methods of land-clearing, ditching and tree-planting with explosives. It's free.

E. I. du Pont de Nemours & Co. Inc.

McCormick Building
Chicago, Ill.

Hartley Building
Duluth, Minn.

Cut-over Timber Lands

Suitable for Agriculture
and Stock Raising in

Ashland County, Wis.

For Details Write

MELLEN LUMBER COMPANY

MELLEN, WISCONSIN



CORD TYPE TIRES

This casing is not a sewed or so-called "lightly used" tire, but is actually rebuilt throughout of new material. Reinforced side walls and a Standard Non-skid tread of new live rubber, same as cut, which should give 6000 miles service.

A High Grade Tube Free With Each Tire Ordered

28 x 3	\$7.15	32 x 3 1/2	\$9.55	33 x 4	\$11.60	33 x 4 1/2	\$12.85	35 x 4 1/2	\$14.35
30 x 3	7.85	31 x 4	10.80	34 x 4	11.95	34 x 4 1/2	13.60	35 x 5	15.35
30 x 3 1/2	8.95	32 x 4	11.15	32 x 4 1/2	12.40	35 x 4 1/2	13.85	37 x 5	15.45

State straight size or clincher. Send \$2.00 deposit with your order. Tire will be shipped C.O.D. with section left unwrapped for examination. If not satisfactory on arrival, return tire and advise at once. Deposit will be promptly returned as soon as tire is received.

DURABLE TIRE AND RUBBER CO. 28121 Wabash Ave., Chicago, Ill.



Here Are Teddy and His Famous Prize Calf.

with hay the principal crop during 1918. Plowing was begun June 1, continuing for four days. The ground was turned to a depth of about eight inches. One and one-half tons of fertilizer were used, by applying manure as a top dressing and then disking it under. No commercial fertilizer was used, nor was any treatment given for possible disease in the seed. Green Mountains, exclusively, were planted. Theodore declares that in planting

for team-hire, labor, seed and fertilizer Theodore realized a net profit of \$176.75 for the year's work. He was assisted in attaining his unusual record by Irving Kirshman, agricultural agent for Menominee county, and to Mr. Kirshman's helpful advice Theodore attributes much of his success.

At any rate, it's a record for other Cloverland boys, and their "Dads" to strive for. In the meantime, Theodore challenges all comers.



Good Farm Buildings

Good farm buildings mean buildings well planned, well placed and built of good, lasting lumber.

Nobody but you can place your buildings to suit you, but the place to go for the lumber is to your local dealer, because he sells "Old Faithful" Hemlock; and for the plans if you want them, for he has or can get for you FREE any of the 27 sets of full-size working plans which we have prepared for the assistance of all who build of good "Old Faithful" Hemlock lumber—the farmer's standby for a full 300 years.

Write us for a book on the kind of buildings you are interested in. We have nine of them, all different, and each book contains coupons good at your lumber dealer's for the plans—ALL FREE.

THE HEMLOCK MANUFACTURERS
(of Wisconsin and Upper Michigan)

Offices 312 F. R. A. Bldg., Oshkosh, Wisconsin

We spread the good news about "Old Faithful" HEMLOCK, but we do not sell it. Get it from your LOCAL LUMBER DEALER.

"Old Faithful"
HEMLOCK
300 years on American Farms

FERTILIZER

16% Acid Phosphate

EXCELLENT DRILLING CONDITION

125 lb. Bags.

\$25.80 Per Ton

F. O. B. Menominee, Mich.

Less 3 Per Cent for Cash With Order

Less Than Ton Lots 15c per Bag
Additional

Contracted growers of sugar beets carried without interest for the fertilizer requirements of their sugar beet crop until harvesting.

Write for prices on other brands and special prices for carload quantities.

Reduce your cost of production by the liberal use of fertilizer and make more profit.

Menominee River Sugar Co.

Menominee

Michigan

Society Cows in Cloverland

FIFTY-SEVEN Cloverland cows have qualified for the Wisconsin Register of Production in its first year of organization.

That is the encouraging report from the five-and-twenty counties of Wisconsin which fall within the geographical limits of Cloverland.

The Wisconsin Register of Production is an institution organized for the promotion in general of better and more profitable dairying. Established in 1918, the register included the names and achievements of 421 Badger cows twelve months later. The sole qualification for membership is that the cow shall have averaged a pound of butterfat a day for the period of a year. Age and breeding are alike disregarded, in accordance with the realization that deeds speak louder than genealogy, even in cattle.

Of the fifty-seven Cloverland cows which won a membership in this exclusive "Four Hundred", thirty-two were Holsteins, sixteen were Guernseys, four were Jerseys, and five were natives. The predominance of the sleek Black and Whites bears out the Wisconsin preference for the breed, which seems at its best within her borders.

The organization sets forth its full purpose as follows:

1. To secure better breeding, better feeding methods, and better care for Wisconsin dairy cows.
2. To emphasize the necessity of judging a bull according to the work

of his daughters.

3. To increase the purchase and sale of cows on the basis of yearly production; and of calves and bulls.

4. To establish recognized yearly records for purebred and grade cows when these cows would otherwise be without records.

A. J. Kramer and R. T. Harris, two dairy authorities of Wisconsin, have published a highly interesting pamphlet on the subject of the register. They point out that the average period of usefulness of a dairy cow is scarcely more than six years, and that every farm, no matter how small, has replacements to make. It is in this necessary practice that the new institution seeks to serve the dairy-men.

The Register of Production demonstrates that high standards can be reached by the "common" dairyman if he tries. It shows also something of how good cows come to be—how dairy qualities are inherited and how they are brought out by good feeding and care. Not all good cows are purebreds, nor are all purebreds good cows. It is neither practicable nor really desirable that all herds be purebred, but, on the other hand, no progress may be hoped for through the scrub. Our main dependence for dairy production will, for generations, be the grade cow—that productive cross between the purebred and the scrub. To secure the grade cow at her best we must call in the pure-

(Continued on page 21)

Creating a Copper Market

(Continued from page 17)

corporation tax to the federal government than is paid by the states of Arizona, Arkansas, Florida, Idaho, Mississippi, Montana, New Hampshire, North Dakota, South Carolina, Vermont or Wyoming.

The per capita wealth in the upper peninsula is greater than the per capita wealth in Arkansas, Colorado, Nebraska, New Hampshire, Vermont and all other southern states.

"There are more than 75 banks in the upper peninsula of Michigan, and the savings deposits of these are greater than all the savings deposits in Delaware, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, Mississippi, Louisiana, Kentucky, Tennessee, Indiana, Kansas, Montana, Maryland, Colorado, Washington, Oregon. The average deposit of each depositor in the upper peninsula is greater than the average in eighteen states."

Here, then are just a few facts in support of the contention of upper Michigan's industrial interests that the region is amply equipped to add the copper manufacturing industry to its long list of achievements. Upper Michigan's advantageous natural endowment as pertains to virgin timber has already established the region as ideal for the location of wooden-ware factories, chemical plants, iron furnaces and other features utilizing wood, or wood products. These industries are rapidly increasing each year.

It is naturally with a vast amount of interest that upper Michigan's pioneer citizens and established industries look to the outcome of Representative Miller's measure. It is a matter of importance more vast, to upper Michigan, than can be fully realized, and the rapid progress of the lakes-to-ocean movement, which would open the Great Lakes region and upper Michigan's copper country to the seaports of the world, only serve to magnify the project. It is looked upon, further, as determining the life and growth, or decline and disuse, of upper Michigan's natural resources in copper.

It is a fact, too, though not generally known, that one-third of the population of the United States is directly

tributary to the upper peninsula of Michigan. That is, situated in the region of the Great Lakes, and "fed" by the arteries of commerce—railroads, waterways and highways—of the Great Lakes region, is a market equal to one-third of the nation's population.

In the past upper Michigan has sent its copper to Connecticut, to Pennsylvania and other copper manufacturing districts throughout the country. The raw product has come back to upper Michigan in the form of wire, copper tubing and other equipments, plus the hundred and one assessments and taxes heaped upon it during the process of shipment, manufacture and re-shipment. In other words, upper Michigan pays double—triple, for the article manufactured from the raw products which the region itself produces. It is not a fair nor reasonable order of things, and it is not entirely necessary nor mandatory that this condition need exist in the future. Hence Representative Miller's measure.

The First National Bank of DULUTH

At the Center of Cloverland

CAPITAL, SURPLUS and PROFITS

\$3,600,000

RESOURCES

\$24,000,000

This bank wants to know you and your problem. The interests of Northeastern Minnesota are the interests of this bank.

Consult us personally or by mail.

Duluth's Oldest National Bank

Society Cows in Cloverland

(Continued from page 20)

bred, and for both we need a means of measurement and record, which we have in the scales and the Babcock test, the Advanced Register and the Register of Production.

Experienced buyers look first for health and vigor along with signs of milking tendencies. A clear and full, but placid, eye; a soft hide; a capacious udder, not meaty, and with even quarters; and a large body with well-sprung ribs—these make a favorable impression. Symmetry and fineness of bone indicate breeding, but this should not be sought at the expense of strength. The durable cow is not always handsome, but she has a certain solidity about her which can be recognized. Now that records are becoming available, buyers inquire about performance of relatives, particularly the dam and daughters of the sire. As a permanent addition to a herd, a relatively inferior cow from a good family is to be preferred to a better individual from a less desirable family.

Even a casual examination of the feeding records of the cows entered in the Register of Production indicates that these cows were liberally fed. Of the 421 cows appearing on the roll at the close of the first year, all had had grain and all but five had been fed silage. Heavy feeding of grain is considered a wasteful process, but liberal feeding of a suitable variety of grains, rationed according to the production of the animals, pays well under anything like normal conditions.

The Register of Production operates under high standards, and its rules are such as to make it a model among similar organizations. Under its laws, entry in the Register is a privilege and not a right. The secretary at his own discretion may refuse to enter a cow in the Register or issue a certificate of registry, provided he is convinced that fraud has been resorted to by the owner, herdsman, or tester.

Annually a book is published by the Register giving full data concerning each animal which has qualified. By this means the fame of both the old and new members of the bovine honorary society will be widely heralded.

Profit in Baby Beef Production

THE producer of baby beef generally finds it necessary to breed his own stock. Calves with the conformation and quality to finish at 18 months of age are seldom bought on the market in any numbers of uniform type, and at a figure where they can be profitably fed out. Older and plainer stock can be bought for less money, will make larger gains, and sell at about the same price a hundred pounds as the finished calf.

The problem for the producer of baby beef is to get his raw material of the proper quality as cheaply as possible, and in the opinion of N. K. Carnes of the Live Stock Division at University Farm, St. Paul, he can generally do this best by keeping a herd of real well-bred beef cows, and by feeding and caring for them economically. The feed and care of the cow will be charged against the fatted calf.

"The majority of beef producers,"

to the advantage of the owner and the purchaser alike.

The justice of having let down the bars to all cows who can produce the required average of a pound of butterfat per day for a year, regardless of lineage, is emphatically demonstrated by the fact that of the 421 members of the Register at the close of its first year, only 116 were purebred. Thus 305 worthy animals gained repute that under the previous scheme of competition they would have been deprived of because of their lack of a pedigree.

After all, it is the cow that can produce that is to be given the right of way. The Register of Production is applying the American idea to its dairy interests, and profiting thereby beyond all expectations.

The following table shows what the Wisconsin dairymen in Cloverland have accomplished under the new organization, and the figures form the most conclusive evidence to date as to Cloverland's true worth as a dairy land.

Breed	No. Cows	Av. Milk Year (lbs.)	Av. Butterfat Yield for Year	Average Test Pct.
ANSTON BROWN CO. ASSOCIATION				
Guernsey	3	9,527	448.3	4.68
Holstein	8	10,332	405.1	3.93
DOOR COUNTY ASSOCIATION				
Guernsey	1	8,325	364.1	4.37
Holstein	2	11,522	434.4	3.78
Native	2	9,514	402.4	4.20
EDGAR-MARATHON ASSOCIATION				
Guernsey	1	7,535.5	395.9	5.25
Holstein	3	11,232	383.4	3.57
KEWAUNEE CO. ASSOCIATION				
Guernsey	1	8,147	380.3	4.66
Holstein	4	9,498	389.8	4.13
Jersey	2	8,060	374.1	4.37
Native	1	7,033	431.2	6.36
PESHTIGO-COLEMAN ASSOCIATION				
Guernsey	2	8,440	381.6	4.46
Holstein	6	11,010	448.9	3.76
Jersey	1	12,569	568.7	4.53
Native	1	8,081	409.5	5.06
POLK COUNTY ASSOCIATION				
Guernsey	3	7,728	379.	4.91
Holstein	2	11,849	441.4	3.73
SHAWANO CO. NO. 1 ASSOCIATION				
Guernsey	1	6,725	368.2	5.47
Holstein	2	9,297	387.8	4.21
STRATFORD CO-OPERATIVE ASSOCIATION				
Holstein	3	10,817	383.6	3.55
Native	1	9,362	463.9	4.70
WOLF RIVER ASSOCIATION				
Guernsey	4	9,289	425.6	4.60
Holstein	2	10,949	436.	4.35
Jersey	1	8,401	384.7	4.6

ONEIDA COUNTY WISCONSIN SOLD OUT ON SEED POTATOES

BUT WE HAVE
Thousands of Acres of Good Cutover

LAND FOR SALE

Get Our Booklet IT'S FREE

Write C. P. WEST, County Agricultural Agent
RHINELANDER, WIS.



MUNSING
WEAR

Mr. Frederick M. Stowell, president of the Munsing-wear Corporation, whose product enjoys an international reputation, was elected to the directorate of The Northwestern, January 8, 1918.

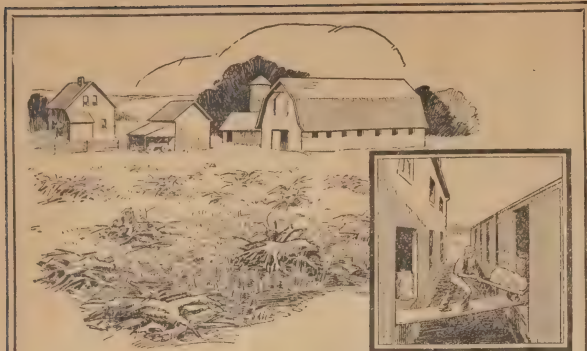
Back of the well directed policies of this bank are the many men whose unusual success is a direct result of far-sighted, level-headed, keen business judgment and a thorough knowledge of the needs of business. They are, largely, responsible for the progress that has placed this bank in the front rank of financial institutions; it is their connection that assures us of future progress.

In choosing a bank—consider also its directors.

DOCK COAL

CENTRAL WEST COAL CO.
MENOMINEE, MICHIGAN

THE NORTHWESTERN NATIONAL BANK
MINNEAPOLIS, MINNESOTA



500 Acres Cleared On One Farm in a Year

The L. Starks Company, of Starks, Oneida County, Wisconsin, cleared 500 acres of land and put them under cultivation last year with the aid of two carloads of

HERCULES DYNAMITE

The operation of a 17,000 acre farm requires skilled management and good judgment in buying the right kind of machinery, implements and supplies.

"The two carloads of Hercules Dynamite were very satisfactory," says Ray Willis of the L. Starks Company. "Our blasters found it of uniform quality and reliability."

Follow the experience of this and other large farms and order *Hercules Dynamite* and *Blasting Supplies* from your dealer.



Hercules Dynamite is for sale by leading Hardware and Implement dealers



HERCULES POWDER CO.

920 Market St., Wilmington, Del.

Gentlemen: Please send me a copy of "Progressive Cultivation."

I am interested in dynamite for _____

Name _____

Address _____



Registering Pure Breds

ALL pure bred animals have only one proof of their pure blood that is recognized by live stock men and by buyers anywhere. This proof consists of the certificate of registration which is issued by the various breed associations upon proper data being furnished by the breeder and the facts verified.

To some people it is enough to know that ever since they could remember they have purchased only pure bred stock with proper certificates accompanying each purchase. Being therefore satisfied as to the purity of their herd, they take no interest in keeping up the registrations, and cause themselves no end of trouble when at some future day they wish to sell their stock to a public that demands the proof of purity of the blood, in the form of certificates of registration.

Nearly all breeds charge double for

registering stock over certain ages. That is one expense, but not the most serious one; where proper private herd records are not kept, accurate information requested by the breeders is rarely available, and therefore the animal is barred from registry because the correct or accurate proof cannot be submitted. Buyers, fearing this, do not care to pay more than grade prices for anything offered for sale without papers.

The value of an entire life's work is in many instances cut in two through the carelessness of owners of good pure bred stock. There are any number of instances where the death of an owner has caused a herd to be sold out, and lack of papers have robbed the surviving family of a good many thousand dollars, which loss might have been avoided by proper attention to this detail each month.

Million Dollar Co-Operation

MORE than a quarter of a million dollars was paid to patrons in 1920 by the Barnum, Minnesota, co-operative creamery for eggs and cream. The sum of \$69,793.06 was paid out for eggs and \$198,730.13 for cream, or a total for the year of \$268,523.19. For the decade ending December 31, 1920, the creamery paid \$282,269.96 for eggs and \$814,324.63 for cream. The grand total for eggs and cream during the ten years was \$1,096,594.59. These figures have just been transmitted by the creamery men to the agricultural extension service of the state university.

In 1911, the first year of the decade, \$9,094.47 was paid for eggs. Only in one year, 1913, did the egg money fall below that of the previous year. In all other years there was a consistent increase until, in 1920, the egg money amounted to \$69,793.06. In 1911 only \$25,767.09 was paid out for cream, but in 1920 the sum of \$198,730.13 was paid for this product. Each year showed a steady and consistent gain. Making due allowance for the higher prices paid the last few years for both

products, the number of eggs marketed increased at least five-fold, and the quantity of cream at least three-fold.

Barnum is the center of a little "cut-over" district in Northern Minnesota. Its farms are small, averaging no more than 90 acres with an average of but 31 acres cleared to the farm. The farmers grow roughage for the dairy stock and potatoes and other root crops, but buy the great bulk of the grain which they need for feed.

Following is the average for the ten year period:

Year	Average Price for Eggs	Average Price Per Lb. Butterfat
1911.....	19½c	25.5c
1912.....	21.4c	30.0c
1913.....	21.2c	30.3c
1914.....	22.5c	31.2c
1915.....	20.3c	30.3c
1916.....	24.4c	24.4c
1917.....	33.9c	44.5c
1918.....	38.5c	52.3c
1919.....	45.0c	65.1c
1920.....	46.9c	64.7c

Cuba and its Problems

(Continued from page 18)

said in '98, Cuba was to be reserved for the Cubans. Uncle Sam merely stood on the corner off the Cuban coast twirling his stick studying his

own handiwork, and keeping out international burglars.

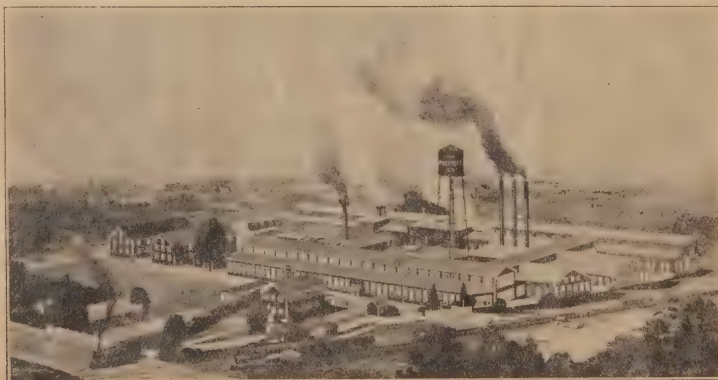
The English Method

It was not at all as Europe would have done the job. Hardly. She would have driven off the Spanish vultures, replaced them by a swarm of diplomats, banked by bayonets, and would have gathered this great sugar-coated island to herself forevermore. It would have been simply one more of her farms, even as the rubber farms of Java and Sumatra, or the ivory and diamond farms of Africa. That's the way they would have done it. But the Americans? Well, they are eccentric, they must do everything their own way. We shall see, so quacked Europe.

When America went to France, Europe again was incredulous. Could there be one country which would go so far and do so much with nothing at stake but a democratic ideal? Is it possible? Even France, who beseeched us to come, when we arrived there asked us wonder-eyed how it happened. "Yes, it is possible," said America. "There's nothing over here we want, your toys are all worn out. We are merely over to set things right; we're busy and want to get back, let's go!"

U. S. For World Democracy

Corroborative of their stand in France the Americans cited the examples of Cuba and the Philippines. Europe took out its marine glasses, examined Cuba and the Philippines and at last stood convinced.



THE PRESCOTT COMPANY

PRESCOTT
MENOMINEE

MENOMINEE, MICH., U. S. A.

Heavy Saw Mill and Pumping Machinery

Cloverland is in the Lead

A RECENT Bulletin from the U. S. Census Department shows that almost one-half of the gain in number of farms in the United States during the past ten years has been in Northern Wisconsin and Minnesota.

To be exact, the number of farms in the United States increased from 1910 to 1920 just 74,708. The gain in Minnesota was 22,450 or approximately thirty per cent of the total; in Wisconsin, 11,999 or about sixteen per cent of the total.

This shows what systematic effort will accomplish. The Agricultural Departments of the Universities of Wisconsin and Minnesota have for several years past made extraordinary efforts to get cleared, the cut-over lands in the northern parts of their states.

The University of Wisconsin, in fact, has maintained during the past five years at least, a Land Clearing Department in charge of an expert who has, by means of lectures, arti-

cles and demonstrations, shown the Northern Wisconsin settlers the advantage of land clearing and the most economical way of doing it. He has had during that time, the assistance of a trained demonstrator of stump blasting whose services were donated by one of the large powder companies.

The Census Bulletin furnishes unmistakable evidence that the public-spirited efforts of the Universities have met with most gratifying success.

There are cut-over lands in other sections of the country that could be made into very valuable farms. Doubtless these lands could be reclaimed and developed into productive farms by the same systematic methods that have yielded such bountiful results in Minnesota and Wisconsin. It is to be hoped that other State Universities having agricultural departments will become interested in the subject. In fact, some of them are already showing an interest, notably the University of Georgia and the Michigan Agricultural College.

Scaly Leg in Poultry

ALTHOUGH the primary cause of scaly leg in poultry is a minute insect, nevertheless wounds and chafes on the leg give the little pest an excellent start.

Poultrymen cannot be too careful in fitting leg bands on their chickens. As a rule, the bands are put on when the fowl is about half grown. It is then too large for the leg. As the leg grows, the band often becomes so tight that the leg is cut or chafed; from that point, scaly leg develops.

Most leg bands are made of tin; the edges are sharp and the band is non-expansive. It would seem that it should be possible to make a metal

leg band for chickens on the order of a key ring. The edges could be rounded and the band would expand to conform to the growth of the leg.

There are already on the market, leg bands made on the spiral key ring principle. They are made of pyroxylin plastic, closely resembling bone. They come in a variety of colors, the edges are rounded so that they cannot cut the leg, and the expansion feature makes chafing impossible.

A metal band made on the same principle might be a trifle more expensive than the prevailing tin bands, but it would seem to be worth the difference in price to the poultryman.

Excellent Farming and Grazing

LANDS

For Sale in Alger, Marquette, Luce and Chippewa Counties, Michigan

Cut-over hardwood lands. Good soil. Fine water. Accessible to railroads and good highways. Near settled communities.

PRICES \$7.50 PER ACRE

and up. Easy Terms.

The Cleveland-Cliffs Iron Company

Land Department

NEGAUNEE, MICHIGAN

Do you know
Nature's grains
make a fine
table drink?



POSTUM CEREAL

is made of selected wheat, bran and molasses. Boil it for twenty minutes or more, and you obtain a beverage of rich, delightful flavor, that is in every way healthful

Postum Cereal is free from harmful elements, and is economical

"There's a Reason"

SOLD BY GROCERS EVERYWHERE

Made by Postum Cereal Company, Inc.
Battle Creek, Michigan.

Mail It!

When you have money to deposit in the form of checks or money orders and are unable to call at the bank promptly, send it to us by mail.

You will receive immediate acknowledgment of the deposit and your funds will then be in a safe place.

First National Bank

MARQUETTE, MICHIGAN

DESIGNATED UNITED STATES DEPOSITORY

Capital and Surplus, \$300,000

The Keweenaw Land Association Ltd.

— OFFERS —

Cutover Lands

in Chippewa, Dickinson,
Iron, Gogebic, Ontonagon
and Houghton Counties
in the Upper Peninsula of
Michigan in tracts to suit

Clay loam, sandy clay loam, sand loam and sand
soils at \$5.00 to \$15.00 per acre.

Generally well watered.

J.M. LONGYEAR, Agent, Marquette, Mich.
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Menominee Saw Co.

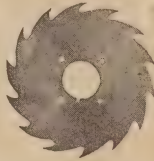
MENOMINEE, MICHIGAN

MANUFACTURERS OF

SHINGLE
HEADING
EDGER
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LATH
SIDING

SAWS

Fully Warranted



GANG
MITRE
GROOVING
CROSS CUT
DRAG
MILLING

SAW REPAIRING OF ALL KINDS

The Splendid Service and the Great
Harnessed Water Power of

M. and M.
Light & Traction Co.

have made Menominee the Power City of
Cloverland, and Menominee County the
best lighted county in the Northwest.

How About the Farm Drafter?

THERE is no getting around the fact that the past few years have been somewhat lean for breeders of horses, even when we take into account the demands of the late war. But at the Ohio State Fair last fall was shown the greatest collection of draft horses ever brought together in one show ring in this country up to that time.

But one explanation can be offered for such a great showing—the horse-men of the country have sensed a change in their business and are getting ready for it. As a matter of fact, the heavy draft horse has always found a good market, and will find a better one.

Of course, the process of motorizing the farm is going merrily on, and every year will see a new machine which will displace some more horses. The other factor in the horse breeding business has been the high cost of feed.

Taking both of these factors into

field work.

In spite of these tendencies, there will be a field of usefulness for the draft horse in the cities for many kinds of hauling for a long time to come. It has been proved that under many conditions the horse is preferable to the motor truck in the cities.

Neither will the motor displace the horse on the farm. The light work horse will, of course, gradually be discarded, but for the heavy power drafter there will remain a steady field of usefulness.

Not every farmer will be able to produce horses profitably, however. On our high priced corn belt farms it is a problem whether or not the draft horse can be produced at a profit. Those regions of this country where pasture is still plentiful and cheap, like certain of our western states, or the regions where there is a lot of rough land, are best adapted for the production of the horse. The breeder of pure-bred horses, who is in a busi-



Renewed Interest is Being Shown in Farm Horses.

consideration, the horsemen are not discouraged. Iron and steel are high and will remain high for a long time. This means that motor machines will be comparatively expensive. Gasoline and kerosene are not as cheap as they used to be, either. The inexorable economic factor is thus working to the advantage of the horse for many lines of work.

For heavy hauling over long distances, the motor truck has proved superior to the horse. For light hauls over short distances the farmer is depending upon light, mobile trucks simply because of the time that can be saved. Some manufacturers are even attempting to motorize all lines of

ness as well as a farming operation, can succeed anywhere provided he brings the proper qualifications to his task. The breeder can always charge enough for his animals to justify a high overhead for feed and labor.

Most of the horses in this country will probably be produced by the farmer who does his work with brood mares. Every community will insure itself of the services of a good stallion, so that the farmer with one, two, or three mares will have the advantage otherwise enjoyed only by the breeder. Such a farmer can raise his horses very inexpensively, because they are a sideline and live upon what is literally gleaned from the farm.

WHEN IN THE MARKET FOR Registered Guernseys

— WRITE OR WIRE —

BAY CLIFFS STOCK FARM

BIG BAY, MICH.

J. B. DEÜTSCH, Owner

MORE FARMERS

There is room for 100,000 new farmers on the cut-over lands tributary to the SOO LINE in Upper Michigan, Upper Wisconsin, and Northern Minnesota.

Good lands which will fulfill any conditions imposed by the new farmer as to location, soil, climate, rainfall, water-supply, roads, schools, churches and neighbors. Lands which can be bought at a price that will fit the pocket of the poor man, as well as meet the requirements of the man of means. Write for information,

H. S. FUNSTON, Land Commissioner SOO Line Railway
MINNEAPOLIS, MINN.

Wisconsin Central Ry. Land Grant Lands in Wisconsin

REFLECTION

California's average annual revenue from her seven foremost crops—oranges, deciduous fruits, lemons, cotton, wheat, barley and beans—is estimated at \$148,000,000. California's average annual revenue from the most dependable crop which that region boasts today—the tourist traffic—is greater than all of these combined, or \$150,000,000.

Colorado's average annual revenue from her tourist traffic is \$50,000,000. Denver's average daily increase in population, directly traceable to the tourist traffic, is about fifty persons.

MICHIGAN'S average annual revenue from her tourist crop is \$75,000,000—\$70,000,000 for the lower peninsula, and \$5,000,000 for CLOVERLAND.

CLOVERLAND'S TOURIST BUSINESS—\$5,000,000.

We hear so much about it—and yet do so little for it.

There is not a progressive merchant, hotel keeper or garage proprietor in the Upper Peninsula of Michigan today who can truthfully say: "I have not shared in the business resulting from the heavy annual tourist traffic to the Northern Peninsula of Michigan."

It is high time, now, that Cloverland begin grooming itself for the big reception—the spring and summer rush of tourists to the shores of Superior. It is high time for the hotel man to dust up the spare room; the garage owner to clear his decks for storage rentals; and the merchant to add a dash of bright color to his window display—FOR THE TOURIST.

Just as sure as the tourist traffic represents the most tangible, dollar-producing source of revenue which Upper Michigan boasts today, so is it that some force, some power, some organization is behind this great movement to encourage to Northern Michigan the annual flood of summer vacationists.

The Upper Peninsula Development Bureau is one of these forces, and that institution is devoting from \$7,000 to \$8,000 a year to bring the tourist into YOUR store, YOUR hotel and YOUR garage. What are YOU doing in return for this FREE ADVERTISING SERVICE?

And now, in order that there may be a more equal division of the \$75,000,000 revenue realized by Michigan from her annual tourist business, the Development Bureau has entered into an advertising plan which, we are confident, will increase this year's tourist traffic 100 per cent, with the subsequent benefit to Cloverland's business establishments. It is a simple, decidedly inexpensive yet most certainly effective plan which has ever been tried out in Upper Michigan.

If a representative of the Bureau does not call on YOU within the next week or ten days, you will profit considerably by writing to the Bureau for further information.

YOU CANNOT AFFORD TO BE LEFT OUT OF THE PLAN.

WRITE

The Upper Peninsula Development Bureau of Michigan
MARQUETTE MICHIGAN

What the I. STEPHENSON COMPANY TRUSTEES

WELLS, MICHIGAN

*Offer to Homeseekers on the sunny side of
CLOVERLAND, the Upper Peninsula of Michigan*

—Choice of 400,000 acres of land at prices ranging from \$20 to \$30 an acre for cut-over land.

—A climate the same as upper New York, northern South Dakota and central Minnesota—this district is 600 miles south of the much advertised wheat belt of Canada.

—A variety of soils fit for all crops grown in the north temperate zone.

—Good roads, good schools, good water and climate.

—Home markets that now are forced to depend on outside communities for much of their food.

—Railroad service that brings 10,000,000 people within a night's ride for farm products and the equal of that afforded the farmers of Indiana, Illinois and Iowa.

**Fruit, Dairying and
Live Stock, Truck
Gardening, Grains,
Root Crops**

—An unsurpassed fruit country, protected by 1,000 miles of shore line along Lakes Michigan and Superior—a practical insurance against frost damage. A choice of five lines of farming.

"HOMEWOOL" VIRGIN WOOL

Write Today

for FREE color card of the finest Guaranteed 100% Virgin Wool Yarn. Your opportunity to get these brilliant colored yarns of full weight at Direct-from-Mill-to-You prices. Warm, beautiful garments for children and grown-ups easily made—write today for particulars. **Some Woolen Mills, Fab. 1876, 242 E. Main St., Eaton Rapids, Mich.**

MILL TO YOU

Speaking of bargains, you can buy a \$5 Savings stamp from your postmaster this month for \$4.14.

According to an old bachelor, the nice thing about getting married is that you don't have to.

IF DEAF OR

hearing is falling, send for FREE Booklet on Nature's Remedy. A safe, easy and efficient Home Treatment. The Liben Co., Denver, Colo.

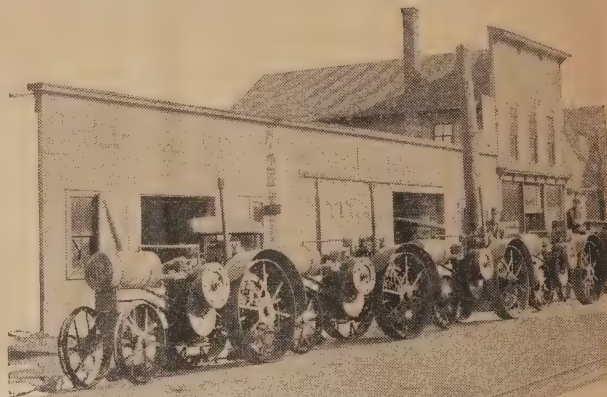
Cloverland Demand for I.H.C. 10-20 Tractors By O. F. DEMSKE

This shipment of 10-20 Titan tractors brings before you the evidence of the ever increasing demand for International kerosene tractors in Menominee county, Michigan, which is situated in the heart of "Cloverland."

P. L'Hote's place of business as you see it, has been the home of International kerosene tractors and farm implements for many years, and through

gines and power implements. Converse with these men of prosperity, and they will tell you of their orders placed at I. H. C. headquarters for tractors and implements for spring deliveries.

There can be no better evidence than that International tractors and implements which are placed in the hands of efficient operators are recognized as being responsible for the



Shipment of 10-20 Tractors Ordered by L'Hote Co., Menominee.

these years Mr. L'Hote has never ceased to be an enthusiastic I. H. C. dealer, ever ready to co-operate with the many good farmers who have their homes in this section of Cloverland.

It goes without saying that in connection with Mr. L'Hote's service, the co-operation and interest of the International Harvester Company of America has at all times been demonstrated in developing the farms of Cloverland. As the traveler visits the many prosperous farms of Menominee, Marinette and Oconto counties today, he will find them operated by International kerosene tractors, en-

rapid agricultural development throughout the land. In speaking of competent and efficient operators of machinery we know the International owners to be such. Schools are held at the dealer's place of business for the purpose of instructing all farmers in operating farm power in order that they may conduct their farms successfully and economically. These schools are conducted at the expense of the International Harvester Company of America and are free for all who show their interests in better farming.

When the farmer buys an International machine, this does not end the transaction but opens up the road to mutual friendship. The I. H. C. is justly proud in saying that the co-operation and service of its organization are at the command of the farmers in making a prosperous "Cloverland."

LISTEN, Cloverland folks— Company is comin'

Actually thousands of New Settlers, Auto Tourists and Farm Buyers will visit Northern Michigan, Wisconsin and Minnesota within the next six months.

LET'S DRESS UP TO WELCOME THEM.

**The Painting Now of Homes, Farms and Stores in Cloverland
Will Make Real Money for All of Us.**

Ask your dealer how cheaply you can "dress up" homes and other buildings this spring with the famous INDESTRUCTIBLE PAINTS, which we have long sold and recommended.

Nothing helps SELL a home or any other building like a coat of fresh paint.

Let's all unite to make our Cloverland section attractive, and to obtain a good price for our farms, if we want to sell them to new-comers.

Ask your hardware and paint dealer. He knows.

NORTHERN HARDWARE & SUPPLY COMPANY

Wholesale Hardware and Paints

MENOMINEE

MICHIGAN

Send for free sample package

REPUTATION SEEDS

and New Illustrated Catalogue of Seeds, Bulbs, Shrubs, and Plants grown especially for Northern Gardens and Farms.

You will want the best, so now while you think about it write to

**DULUTH FLORAL CO.,
Duluth, Minn.**

AGENTS WANTED.

**First National Bank of
Iron Mountain
Iron Mountain, Michigan
Resources Over \$1,600,000**

Officers:

E. F. Brown, President; J. C. Kimberly, Vice-President; W. J. Cudlip, Second Vice-President; F. J. Oliver, Cashier; Leo H. Mortensen, Assistant Cashier; J. W. Franson, Assistant Cashier.

Directors:

E. F. Brown, J. C. Kimberly, W. H. Scandling, A. Bjorkman, W. J. Cudlip, R. W. Pierce, Jr., R. C. Brown, G. O. Fugere.

1921 Dairy Show to be Held in Minnesota

By R. L. RUDDICK

The National Dairy Show of 1921 is to be held upon the State Fair grounds of Minnesota, a point convenient to the large dairy area of Northern Iowa, Michigan, Minnesota and Wisconsin.

The dairy cow has demonstrated that she is the safest basis upon which to build agriculture in the northwest. She has proven her position. She fills the bill for the bringing of cut-over lands into general agriculture. Her proven worth already exists in such territory.

The northwest has made rapid strides in dairying in the last half decade, wresting from the eastern states the laurels for the greatest output of dairy products, but she has not yet begun to realize the full value of the dairy cow, because of the very small cow production that now exists in that country. So that the men of vision in the industry who believe that dairying can be made less onerous and more profitable by the introduction of the better cow, have invited this great National Dairy Show to come to the northwest, that its inspiring influence may lead to an improvement in cows, manufactured products, and men engaged in the industry.

The show will be held Oct. 8 to 15th inclusive, and will give all of the people of the northwest country an opportunity to see the best representatives of the five leading breeds of dairy cattle, as well as all of the ad-

vancement that has been made by man for the better and more sanitary way of manufacturing and handling dairy products.

The show is an opportunity of the land interests and immigration departments of the four states mentioned, as well as other northwest states, to organize for settling up the untilled areas of this section.

Attention—Potato Growers

GREEN BAY is the GATEWAY to CLOVERLAND and most of the produce from Cloverland, and supplies for Cloverland must pass through this Gateway. We are POTATO SPECIALISTS at the GATEWAY. Our trade extends from Wisconsin to the Gulf of Mexico, and from Kansas to Pennsylvania, embracing the entire Mississippi Valley, which is the great potato consuming section of the whole United States.

This section will consume large quantities of northern Potatoes during April and part of May, after which southern NEW POTATOES will gradually take the place of Northern Potatoes, leaving a narrow and restricted market for old Northern Potatoes late in the season.

Why not take advantage of the present market and load and ship your Potatoes before warm weather comes. We offer you our excellent facilities, long experience and selling service, in handling and disposing of your Potatoes.

It's Up to You as a Parent

whether you feed your boy or girl real building food, or something that merely "tastes good"

Grape-Nuts

Furnishes exactly the food values needed to build young bodies, and the taste is delightful

Grocers everywhere sell this staunch wheat and malted barley food

Ready to eat—Economical

atoes. We will advance reasonable sums on receipt of Bills of Lading. ALWAYS NOTIFY US BEFORE SHIPPING, so that we can furnish shipping instructions.

Grade your Potatoes to comply with U. S. Grade No. 1, and put them up in new 150 pound sacks. We can furnish sacks at cost, which is about 11c f. o. b. Green Bay, at present. If you do

not care to sack them, grade as stated above and load in bulk.

Let us hear from you with advices of present or later shipments.

Assuring you of our prompt and careful attention to your interests, we are

Yours very truly,

PLATTEN PRODUCE CO.

South St. Paul is one of the most modern Livestock Markets in the United States

There is no other stock-yards in the United States which has any such protection for their patrons.

SHIP YOUR LIVESTOCK TO SOUTH ST. PAUL WHERE ALL YOUR INTERESTS ARE FULLY PROTECTED.

ST. PAUL UNION STOCKYARDS CO.

It is organized so as to afford very best present day protection to shippers. Each of the following organizations have their individual duties in connection with marketing live stock at South St. Paul:

ST. PAUL UNION STOCK YARDS COMPANY

owns all equipment and furnishes handling service in the yards, but has nothing to do with the buying and selling of live stock on the market.

SOUTH ST. PAUL LIVE STOCK EXCHANGE

has 33 commission firms and 61 dealer, trader and jobber firms, each of which is heavily bonded to legitimately handle all buying and selling of live stock on consignment for the public in accordance with the rules and regulations of the Exchange. All firms are bonded to the Live Stock Exchange for \$20,000 and to the St. Paul Union Stock Yards Company for \$5,000 each. All firms that buy on order are also bonded to the State of Minnesota for from \$5,000 to \$15,000 each, according to the business done.

BUREAU OF ANIMAL INDUSTRY

U. S. Department of Agriculture maintains a force of twelve to fifteen men who inspect all incoming and outgoing live stock and detect the presence of any diseases that may be communicable to other live stock, or man, and if any are found to take such steps as are necessary to prevent further spread.

MINNESOTA LIVE STOCK SANITARY BOARD

State of Minnesota maintains a force of inspectors in the stock yards to enforce the provisions of various State laws and regulations pertaining to protection of the health of domestic animals that come into the yards and also those which are sold and destined to points in Minnesota.

BUREAU OF MARKETS

The U. S. Department of Agriculture maintains an office at the yards, which immediately upon receipt of telegraphic reports from all principal live stock markets in the United States, posts bulletins for the benefit of commission firms, dealers and shippers. These bulletins enable them to have timely information from controlling markets and more advantageously receive full value for their live stock from packers and other buyers.

MINNESOTA RAILROAD AND WAREHOUSE COMMISSION

Minnesota maintains a force of State Supervisors of Stock Yards. The Commission receives and investigates all complaints and sees that all laws, rules and regulations regarding the public stock yards are complied with and that all rates and charges for services of the Union Stock Yards Company are fair and reasonable. All live stock commission merchants are licensed in this State Commission. All live stock sold in the yards is weighed by official State Weighmasters, who are bonded for \$5,000.00 in order to insure shippers correct weights.

To the Prospective Settler:

In looking about for the place in which you are going to build your farm home, are these some of the questions you are asking:

Can cut-over lands be bought for \$10, \$15 to \$25 per acre?

Has hardwood timber grown on these lands so that I may know that the soil is productive?

Are there good railroad facilities, good schools, churches, roads, and neighbors?

Is work plentiful, so that I can earn a good living for my family while clearing my land and getting established?

Is the climate healthful; can good crops be raised; is there a market near at hand?

How about your rainfall, is it plentiful?

Are your established farmers progressive?



If these are your questions, read their answers in the following:

Thirty years ago Gogebic County had no farmers. Today there are 600 thrifty and contented farm families. All started on cut-over lands bought at low cost and on easy terms.

Gogebic County's varied industries, mining, woods-work, and farming, enable the settler to live comfortably while clearing his land and getting established.

The great iron ore mines of Ironwood, Bessemer and Wakefield use thousands of pieces of mining timber, cords and cords of cedar lagging, and hundreds of trestle poles, thus furnishing winter work for the settler and the best possible market for the settler's timber.

These bustling mining centers of 18,000, 7,000, and 5,000 population, respectively, with the greatest iron ore mines in the world, furnish ready markets for all farm products at good prices.

Gogebic County is especially adapted to dairying. Bumper crops of clover, oats and peas for ensilage, corn for ensilage, and root crops are grown.

Beautiful farm homes, modernly equipped dairy barns, silos, and contented herds of Holstein and Guernsey cattle, mark the landscape throughout the county.

Guernsey and Holstein Breeders' Associations, a Cow Testing Association, a Federal Farm Loan Association, Farmers' Milling Companies, a County Farm Bureau, Banks friendly disposed to farmers—all these speak for the agricultural development of Gogebic County.

Gogebic County held the largest and most successful Fair in its history in 1920.

Carl Johnson, Gogebic County Junior Live Stock Judge, won state and national honors in 1920.

Big land clearing projects are under way for 1921.

Several carloads of dynamite have been purchased co-operatively by settlers.

These cut-over hardwood lands are highly productive. Soils that grow hardwood timber will not blow away.

We have an ample and regular supply of moisture. Drought is unknown. Total or even partial crop failures are unheard of.

Gogebic County is not the Promised Land—it is not a place of milk and honey, but it welcomes and endeavors to help industrious, thrifty, and ambitious home-seekers. With very little capital, but with an earnest desire, coupled with ability and willingness to work, the settler can establish himself and his family comfortably here. Many have done it. Why not you?

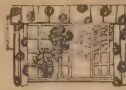
Investigate these lands, so conveniently and beautifully situated in Greater Cloverland, the last great American frontier.

The latest U. S. census shows that 51% of all increase in agricultural development has taken place in Greater Cloverland in the ten-year period just past. Start your little development program before all these inexpensive low-priced lands are taken up.

Trout streams, great forests of wild life, good roads, and the largest inland lake in the state (Lake Gogebic) make their strong appeal to the sporting blood of able-bodied settlers.

Get away from the life of a tenant farmer. A little money, courage and energy will build you a farm home here.

C. E. GUNDERSON,
COUNTY AGRICULTURAL AGENT,
IRONWOOD, MICH.



Woman and the Home

By MAE T. ERDLITZ



THE MOTHER AND TOOTH CARE

Perhaps there is no more difficult, distasteful, and seemingly thankless job for the mother than to teach her children to clean their teeth properly and then see to it day in and day out that they do clean them as they have been taught. Certainly in this task, pre-eminently, "Eternal Vigilance is the price of success."

The mother should sit down before each child separately and give him a lesson carefully, using her own tooth brush and showing him by cleaning her own teeth just how it should be done. Then she should have the child go through the process, correcting his mistakes thoroughly but sweetly until she is convinced that he knows how to do it exactly right. After that it is a steady pull every day to remind, insist, and inspect.

The proper way to clean teeth is this: Use a rotary movement from the gums downward so that you rub "with the grain"—which lines go from the root to the edge of each tooth. The usual sawing movement of the brush across the teeth does little good. Not only the teeth should be brushed but the gums as far up as can be reached and the back of the tongue. It is particularly important that the backs or inner sides of the teeth be brushed thoroughly, and as this is difficult the mother will need to attend strictly to this or it will be neglected. The front teeth below need special care on the back or inner sides. Near these, large saliva glands are located and these two teeth will be coated with tartar in the inner side at the roots unless strongly rubbed daily. This tartar will loosen the front teeth and the reason why so many adults find their

lower front teeth are becoming crooked.

After brushing the teeth it is well to rinse the mouth with a mild tooth wash, as salt water, forcing the water between the teeth.

Tooth powder is better for tooth cleansing than a paste or soap as the mild friction and scour of a powder is needed.

SUBSTITUTE FOR MAPLE SYRUP

"Have more maple syrup on your cakes," I said to our guest, "you know we're in the maple-syrup country."

"I will," he replied. "This is so good. It's the real thing."

And then, my conscience, more honest than wise, made me tell him how I had made it. It was like this: Stripping off the rough wood, I had boiled the smooth part of some hickory bark until it was a light brown tea. To this I added sugar and made my syrup. None but an expert could tell that it was not maple. There are other ways:

Put one pint sugar in a dry skillet, stir until browned thoroughly, add one cup of water and boil until the right thickness; or

Boil six corn cobs two hours in one quart water. Strain water over a pint of sugar and boil to a syrup; or

Make a syrup of white and brown sugar and add a few drops of the commercial flavor mapleine.

Celery Filled With Cheese

Season cream cheese with salt to taste; mix and fill into small hollows of celery tips. Dust with paprika and very finely chopped parsley. These are very attractive if served on the salad, whether served individually or around the edge of a large bowl.

Lighten the Burden of Weed Destruction with DICKINSON'S dependable -SEED-



Ask the man that is planting them. 61 years experience back of them. Your fathers planted Dickinson's GLOBE, PINE TREE and ACE brands.

PLANT
PINETREE—99½% Pure
TIMOTHY SEED
GLOBE, PINETREE, ACE
BRAND CLOVERS

AT YOUR DEALERS

Kamp Kaw Baw Gam, a Summer School for Boys

By JOHN A. DOELLE

"Where the birds sang in the thicket
"And the streamlets laughed and glist-
tered."

LONGFELLOW, they tell us, sought the hills and valleys of Cloverland in the Upper Peninsula of Michigan for the inspiration which gave to America's youth that most fascinating of Indian fairy-tales, "Hiawatha." And the now immortal Longfellow apparently found in Cloverland that which he sought, for there is no work today which so beautifully describes the gorgeous natural splendors of Northern Michigan's great pine region.

The character of Hiawatha has found a living picturization in my own mind—and I am sure in the minds of others who knew the man—in the memory of old Charlie Kaw Baw Gam, last chief of the Chippewas who died several years ago in a small ramshackle hut at Presque Isle, near Marquette. Tall, straight as an arrow, yet with the burden of 104 years heaped upon that erect head and the broad shoulders, Kaw Baw Gam roamed his native haunts on Presque Isle almost to the day of his death. Many a thrilling tale of adventure was built about him by the youth of Cloverland, and Charley's "umph", in answer to the excited queries of the hundreds of little tots who made regular weekly pilgrimages to Presque Isle, meant more to them than volumes of story books. For didn't Kaw Baw Gam know where there "waz billyuns of dollers worth of gold 'n silver 'n everything stowed away on Presque Isle?" And wasn't it Kaw Baw Gam who stole forth from his little shack, when the moon was high in the Heavens, and wailed out his prayers to the Keeper of the Happy Hunting Ground? And couldn't he build a big, roarin' fire by rubbin' a couple sticks together, 'n make swell bows and arrows 'n—'n—well, there was nothing in the minds of Cloverland's boys and girls which Kaw Baw Gam could NOT do.

And today, on Presque Isle, you will find a huge boulder, carved from the cliffs near the little peninsula, and bearing across its broad surface, the inscription: "Kaw Baw Gam." The last chief of the Chippewas is buried beneath it, with his squaw by his side. He has gone to his Happy Hunting Ground.

And so we learn that our old chief's name is to live again, and is to be affixed, once more to a worthy enterprise—an enterprise which, if effectively and worthily carried out, should truly merit that name which signifies, to most of us, stoutness of heart, strength of body and character, and sincerity of purpose.

Have you heard of "Kamp Kaw Baw Gam?"

Probably not—yet. Kamp Kaw Baw Gam, is, or will be, Cloverland's first out-door semi-military academy. It

will be a happy combination of woods, water and academics; it will have a threefold purpose—to remedy, where possible, physical defects, to instruct the youth in all branches of woodcraft and out-door athletics and to train his mind in such academic courses as will adequately prepare him for the higher institutions of learning. Did I say a happy combination?

To Henry J. Loper, of Jackson, Michigan, former physical director of Culver Military Academy, an ex-officer of artillery, A. E. F., and at the present time principal of the high school of New London, goes the credit of originating the idea. H. Orville Bell, a former Marquette young man, now teaching in the high school of Fond du Lac, Wisconsin, has been strongly instrumental in plotting that idea to a definite plan.

The promoters of the camp and their associates, have selected a site, mapped out a systematic course of in-

struction, arranged a definite schedule of classes, recreation, etc., and have assigned the various branches of the work to individuals adequately capable of handling the work.

Kamp Kaw Baw Gam will be located on the shores of Deer Lake, Alger County, at its eastern extremity, on a plot of ground covering some forty or more acres. Accommodations sufficient for 400 Cadets will be provided this spring. In preparation for the official opening on June 29. The school will be continued for eight weeks, closing on August 24.

There is probably no location in Upper Michigan more adequately prepared, by nature's hand, for the work which will be carried out at Kamp Kaw Baw Gam, than Deer Lake. Within a stone's throw are three of the most picturesque water scenes to be found anywhere—Munising Falls, Laughing Fish Falls and Au Train Terraces. And a short jaunt through the dense pines which surround the

site of the "Kamp" brings the hiker in full view of Pictured Rocks—a favorite objective among tourists the country over. Pictured Rocks, once seen, is never forgotten. Grand Island, one of the prettiest game preserves also awaits the cadet. The site offers excellent and ample facilities for bathing and boating, and Cloverland's nimrods tell us that Deer Lake is "jes" 'live with 'em"—meaning trout, of course.

Probably one of the most interesting, and valuable, features of Kamp Kaw Baw Gam will be the physical corrective work carried out under the direction of Mr. Loper. "We will not guarantee, of course, to correct extreme physical defects," said Mr. Loper, "but we will emphasize remedial exercise and gymnastics where such is deemed necessary. Careful and energetic attention will be given to round shoulders, over-weight, under-weight, and similar physical deficiencies. And I am sure that we can effect decided improvements in these kinds of cases—with possible complete remedy in some instances."



Cletrac Fits the Eastern Farm

CLETRAC goes straight through with the early-spring plowing and has the seed bed ready when weather and soil are just right for planting.

This tractor travels the firm, dry road laid down by its own tank-type tracks. These broad treads grip the soft ground and keep Cletrac from digging in or packing the mellow, fresh-turned earth. Most of the power from its husky motor is turned into direct drawbar pull.

Cletrac is compact and low-set—hugs the ground on side hills. It handles a double-disc harrow and heavy drill without faltering. It's easy to operate and because of its short turning ability, works small fields and gets into the corners.

Our booklet "Selecting Your Tractor" will give you lots of valuable tractor information. Ask your local Cletrac dealer for a copy or write direct to us.

THE CLEVELAND TRACTOR CO.

"Largest Producers of Tank-Type Tractors in the World"
18959 Euclid Ave. Cleveland, Ohio

THE NORTHLAND MOTORS COMPANY
616 Main St. Menominee, Mich.
Distributors for Northeastern Wisconsin and Northern Michigan



HARD THIS WAY
BUT—



EASY ON A TRACK
THE CLETRAC WAY

SPECIFICATIONS

Horsepower: 12 at drawbar, 20 at belt-pulley
Length: 96 inches
Width: 50 inches
Height: 52 inches
Weight: 3420 pounds
Turning Circle: 12 feet
Traction Surface: About 800 square inches
Center to Center of Tracks: 38 inches
Belt Pulley: Diameter 8 inches, face 6 inches

Homemade Cake

is never so delicious as when it contains the rich, true fruit flavors of

Van Duzer's
Certified
Flavoring
Extracts



These extracts are the concentrated goodness of fresh fruits. None of the flavor is lost in baking.

an Duzer Extract Co. New York, N.Y.
Springfield, Mass.

Everything in Banking

SAULT SAVINGS BANK

Sault Ste. Marie, Michigan

Member Federal Reserve System

Cloverland Bargains

RATE: Seven Cents a Word

Copy for the Cloverland Bargains column must be in the office not later than the fifteenth of month preceding publication. Address all want ads to the CLOVERLAND MAGAZINE, Cloverland Bargains Dept., Menominee, Michigan

FOR SALE—270-acre farm, 100 acres cleared, the balance in second growth timber, all fenced in. One small house, one large house, one chicken house, 3 pig houses, large wood shed, water in house and barns and good running water through the farm. 60 hens, 4 yearling pigs, 10 good milk cows, one pair of heavy draft horses weighing 3,300 lbs., one gray driver (6 years old) about 1,200 lbs. One separator, one eight-horse gas engine with circular and drag saw, one Monarch Tractor Model B 30-18 1921 with a four-bottom Oliver plow, two-team plow, harrows, disks, drags, manure spreader, potato digger and planter, moving machine, hay racks and forks, and large kettle. Good soil and level land which was plowed and last fall. Have hauled over one hundred loads of manure this winter. Farm is located seven miles from Marquette, Mich., opposite the Morgans Heights. Good auto road to it and railroad station. This farm would make a good dairy farm, as there are three towns of about 50-60 population within a radius of ten miles. There is a gravel pit about 20 acres square on this property included in sale. Will sell the stock and machinery at \$75.00 per acre. William Dorais, Marquette, Mich.

FOR SALE—Mink Bred for Heavy Egg Production Barred Rocks. S. C. White Leghorns large winter layers, Leghorn pullets mated with Cockerel weighing six and a half pounds, all trapped and fourteen years. Book orders for hatching eggs \$2.50 per 15. Real good Airedale pups for sale. See Faseman, 1722 New York Ave., Manhattan, Wis.

FOR TAX HISTORIES, Statements, Advertisements of Tax-claims, or other matters of state, write G. C. Cotton, Tax Abstractor, Lansing, Mich.

FOR SALE—Upper Peninsula cut-over lands suitable for grazing or general farming, in Alger, Chippewa, Gogebic, Iron, Mackinac and Schoolcraft counties. For information write, Land Department, Charcoal Iron Company of America, Marquette, Michigan.

SEED CORN—Wisconsin No. 25. Earliest Yellow Dent, firm dried, shelled and graded. Write for booklet, W. I. Brockson, Box "E", Marinette, Wis.

WANTED—All salesmen to sell drug and hardware dealers. Also men to call on stockmen and farmers. Six-Ton Antiseptics for live stock, poultry and farm building sanitation. Apply at once, Parsons Chemical Works, Grand Lodge, Mich.

RESIDENT owner several adjoining farms continuous both sides State Highway, N. W. Wisconsin. Will sell to actual settlers. Deal Direct. Prices, terms right. Location, soil, water, fuel, schools, churches, markets, transportation best, closest inspection. Many years owner-operation, with soil conservation. Tons green clover annually turned under. Newly seeded hay and grain. Harvesting 1921 adjoining fields optional. New buildings. Farms 120 to several hundred acres each. Pioneering past, 3 to 5 miles from manufacturing village and city, 30 from big city. Opportunity several families locate together in country noted for farm products. Owner remains. Correspondence solicited. References furnished. Write Box 75, care Cloverland Magazine.

FOR SALE—80 acres all tillable land, no stones. Some improvements. Located in a rapidly developing territory. Cash or time. Communicate with L. Loucks, Logan, Oconto County, Wis.

LAND CRUISER desires position for season of 1921. Write L. Loucks, Logan, Wis.

WANTED—Position as working manager with someone on large tract of land to be developed into a live stock farm. Have had an agricultural college training and live stock experience on large live stock grain farms. Prefer to work on salary and percentage basis. Will invest some in good proposition. Best of references. Address, Box 84, care Cloverland Magazine.

FARMS WANTED—To sell your real estate, business or patent quickly for cash, write Northwestern Business Agency, Minneapolis, Minn.

WANT TO HEAR from party having farm for sale, give particulars and lowest price. John J. Black, 177th St., Chippewa Falls, Wis.

FREE Wisconsin Bulletin—Soil, climate and crops. Immigration Bureau, Wis. Dept. of Agriculture, Capitol 5, Madison, Wis.

CLAY BOTTOM LANDS FOR SALE—In Mackinac and Chippewa Counties, suitable for grazing purposes. Can be bought on partial payment plan. Write Wilwin Company, Limited, Wilwin, Mich., for particulars.

A FINE FARM FOR SALE—280 Acres, one mile west of Carney, Mich., which has good schools and a creamery, 150 acres of this land is cleared, has a good house and hay barn and small orchard, plenty of running water all the year. Uncleared land well seeded to grass; the soil is clay loam. There is not an acre of poor land in the farm. Easy terms. Address Box 68, care Cloverland Magazine.

FOR SALE—2,000 Acres land in one block. Excellent soil. Well located. Price and terms attractive. Write Fred A. Roper, Menominee, Mich.

FOR SALE—250,000 acres of unimproved cut-over lands in tracts to suit purchaser. Prices \$5 to \$15 an acre, terms reasonable. Address J. M. Longyear, Marquette, Mich.

FOR SALE—Choice cut-over hardwood lands, especially adapted to grazing and general farming. Small or large tracts at reasonable prices, terms to suit purchaser. Northwestern Co-operative & Lumber Co., Gladstone, Mich.

FOR SALE—One fine 3,200 lb. team, bay geldings, 6 and 7 years old; gentle, excelling farm team; includes heavy farm harness in A-1 condition, price \$450. One grade cow, half Jersey half Guernsey, 8 years old, gentle as a lamb, milks 14 qts. when fresh, freshens in July; price \$150. One 1918 Ford touring car, excellent mechanical condition, tires new; price \$450. One western saddle pony, rein broken, speedy, full of life, gentle; includes fine western saddle; price \$80. Ten tons A-1 clover hay; 25 tons clover and timothy mixed; baled; at market price. Address W. B. Wallace, Lakewood, Wis.

WANT TO HEAR from party having farm for sale, give particulars and lowest price. John J. Black, 177th St., Chippewa Falls, Wisconsin.

WAUKESHA FARM FOR SALE—56 acres highly improved farm in Waukesha Co., 14 miles from Milwaukee, 5 miles from Waukesha. Concrete road will pass farm. 10-Room brick house, hardwood floors and hot water heat, acetylene lighting system in house and barns. Basement barn 36x70, 12x28, all in good repair. This location suitable for general store, auto supply or hotel. Price \$14,000. Liberal terms to responsible parties. Address John Casper, R. 4, Waukesha, Wis.

FOR SALE—160-acre farm, 44 miles from Ogema, Wis. 50 acres cleared, 25 under cultivation, good water, well fenced, 1/2 mile to school and from trunk highway. For terms and price write owner, J. Jones, Phillips, Wis.

FOR SALE—We own 15,000 acres of cut-over lands in Dickinson, Baraga, Menominee, Iron and Gogebic counties, in the Upper Peninsula of Michigan; 20,000 acres in Forest and Florence counties, Wisconsin. Any size tract on easy terms. J. V. Wells Lumber Co., Menominee, Mich.

SOY BEANS—Northern grown Wisconsin. Early Black and Rio Sans. Write for booklet, W. I. Brockson, Box "E", Marinette, Wis.

TIMBER LAND FOR SALE—One-third interest in 6,200,000 ft. fir and cedar located in Lane County, Oregon, in fruit belt. Land and timber first quality. Inquire E. S. Eaton, 310 Minn. Ave., Gladstone, Mich.

FOR SALE—Italian bees, queens and nuclei. B. F. Kindig, Box 895, East Lansing, Mich.

OKLAHOMA FARMS—Write for free agricultural booklet. Board of Commerce, Shawnee, Oklahoma.

HOLSTEIN OR GUERNSEY CALVES—Seven weeks old, 31/32nds pure, \$25 each. Satisfaction guaranteed. Edgewood Farms, Whitewater, Wis.

GUERNSEY BULL CALVES FOR SALE—Calf dropped Dec. 20, 1920, by Ina Masher, sired by Tamworth Cheese of Crab Tree farm. This is a nice, straight calf fawn with white markings, light nose; a good, growthy fellow. The kind you want to improve your herd. Priced at \$75 F. O. B., Wakefield, Mich. William J. Weston, Wakefield, Mich.

FOR SALE—Bull calf dropped Feb. 10, 1921, by Helen of Dalry Dollar farm, sired by Tamworth Cheese. A nice straight individual, exceptionally well marked, light fawn, star in forehead, and promises to be an exceptional fellow. His dam is a very promising coming 4 year old, this being her second calf. Priced at \$90 F. O. B., Wakefield. William J. Weston, Wakefield, Mich.

FARM MANAGER—Wants position. Graduate of College of Agriculture, ten years' experience as manager on Wisconsin Experimental and Demonstration farms. Good references. H. E. Parsons, Peshigo, Wis.

Cloverland's Packing Plant Now Acme

Announcement is made of the consolidation of Indian Packing Corporation and Acme Packing Company, both well known to the trade.

The consolidated organization will be known as Acme Packing Company. The combination of these two strong factors in the meat-canning industry into one company is expected to accomplish the annual saving of at least \$1,000,000.00 in costs of operation, management, selling and advertising.

The new corporation will be headed by C. E. Martin, president and organizer of Acme Packing Company, who is responsible not alone for the phenomenal success attained by the Acme Packing Company in the canned meat business, but for the bringing about of the consolidation.

Mr. Martin, with very small capital and under the greatest of handicaps established, in 1909, the Acme Packing Company and developed the business to the position of a dominant factor in its field.

As president of the consolidated company he will find further opportunity to show his constructive abilities and it is freely predicted that the new organization will surpass the marked successes of the past.

Indian Packing Corporation was organized under the laws of Delaware, July 22, 1919, and has been known as a large and very aggressive advertiser of Council Brand canned meats and other canned food products and have large and thoroughly modern packing plants at Green Bay, Wis., Providence, Rhode Island, and Greenwood, Indiana, where large and continuous shipments have gone forward.

Acme Packing Company's plants are located in Chicago and branches are maintained throughout the country.

Virtually the entire organization of the Indian Packing Corporation retires, with the exception of John M. Clair, secretary, who has been elected as one of the vice-presidents of the new corporation.

The other officers will be C. E. Martin, president; Meyer Katz, vice president; A. C. Tolde, secretary and treasurer, all of whom have held the same offices with the old Acme organization. The new Acme Packing Company will have a capitalization of \$12,000,000.00—all common stock, and will have a charter from the State of Illinois.

Both of the well known brands, Red Crown and Council, will be continued by the new corporation, thus assuring continuity of the large trade established for the two brands by dealers everywhere.

W. P. WAGNER, Pres. H. S. ELDRD, V-P
GEO. D. NAU, V-P H. P. KLAUS, Cashier
R. W. SMITH, Asst. Cashier

Citizens National Bank

Capital and Surplus \$500,000.00

GREEN BAY, WISCONSIN

PULLED 64 STUMPS IN THREE (3) HOURS

—and only one man operating. That's what the Martinson One-Man Stump Puller actually accomplished before hundreds of spectators at the Minnesota Land Clearing Demonstration last May. It will do the same for you, without the assistance of teams, tractors or hired help.

The Martinson is mounted as a wheelbarrow and is easily moved, adjusted and operated. Its scientific construction develops wonderful strength. You don't have to buy a different size machine for varying sized stumps. The Martinson pulls them all big and little alike. You need one.

MARTINSON MANUFACTURING CO.
2018 West First St. Duluth, Minnesota



MARTINSON STUMP PULLER

JOHN S. COMAN

Lumber Inspector and Shipper

Deputy Inspector, National Hardwood Lumber Association
Shipping from

Lake Michigan, Georgian Bay and Lake Superior Points

MENOMINEE, MICHIGAN

AMERICAN EXCHANGE NATIONAL BANK

OF DULUTH, MINNESOTA

Checking Accounts
Savings Accounts
Travelers' Checks

Foreign Exchange
Safe Deposit Boxes
Bond and Trust Department

Total Resources, December 31st, 1919

Over \$20,000,000.00

Are You a Leader or Just One of the Crowd?

STOP FOR a minute and analyze your position. Are you a renter of land? If so, why? Are you thinking for yourself or are you accepting what you find at hand, a victim of circumstances and custom. Men who think clearly for themselves move forward.

NORTHERN MINNESOTA

a part of that wonderful empire, known as Greater Cloverland, offers you the opportunity of becoming a leader. The opportunity to mold your own future on your own land.

In Northern Minnesota land values are yet low, and the fertility of the land unquestioned.

We own large tracts of desirable land and are prepared to help you clear up and own a farm of your own.

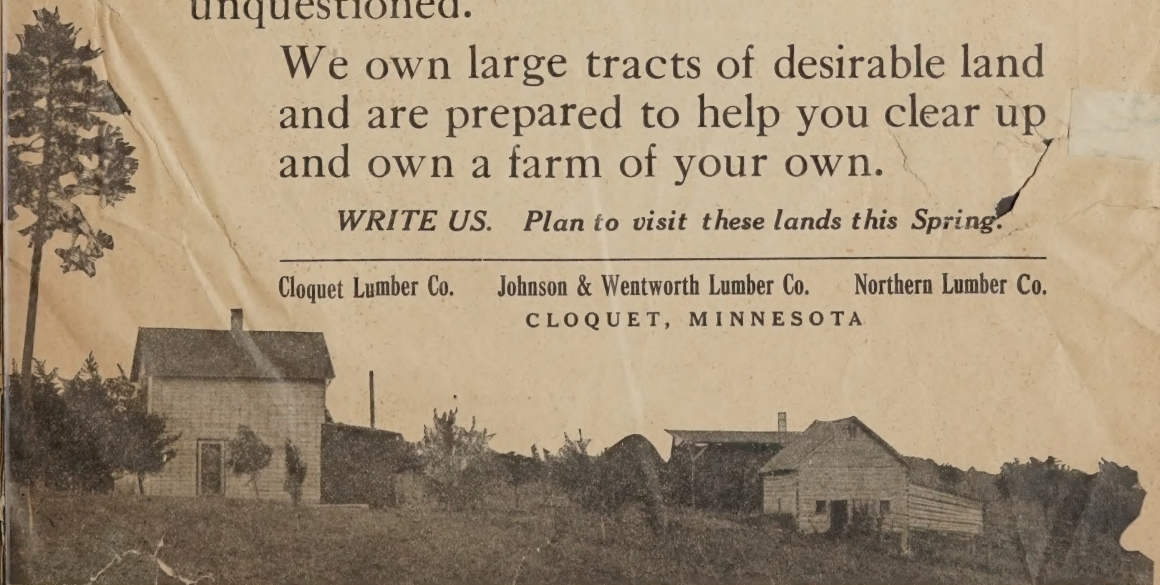
WRITE US. Plan to visit these lands this Spring.

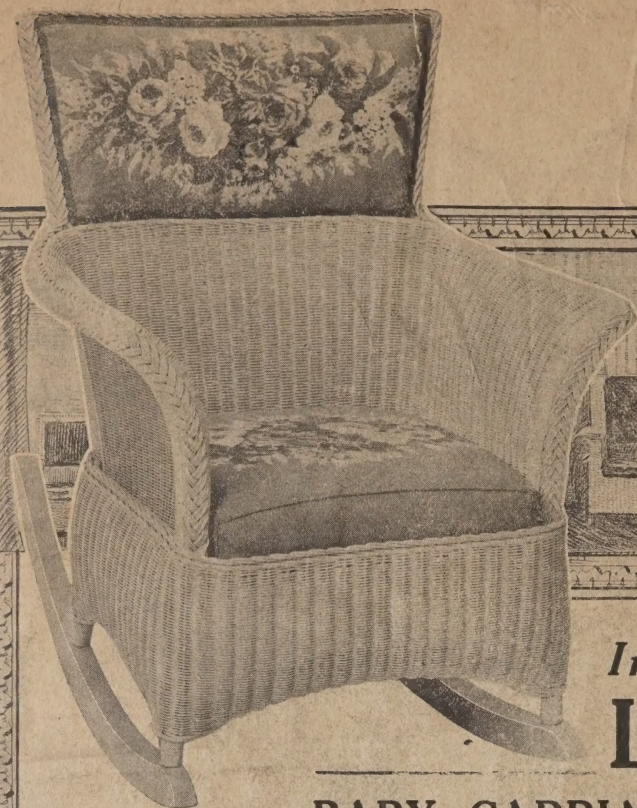
Cloquet Lumber Co.

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CLOQUET, MINNESOTA





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The above design stamps
the superiority of

LLOYD LOOM WOVEN
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Where you see it you may
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MARSHALL BURNS LLOYD—a product of Cloverland—THROUGH HIS REMARKABLE INVENTIVE GENIUS HAS CONQUERED THE PROBLEM OF THE WICKER WEAVING WORLD. FOR CENTURIES WICKER ARTICLES HAVE BEEN WOVEN BY HAND AND UNDER MOST EXPENSIVE AND IMPERFECT METHODS.

BUT MARSHALL BURNS LLOYD—the Cloverland inventor—spanned the gap of ages by inventing a method and loom for producing wicker Baby Carriages and Furniture. His inventions revolutionized the wicker weaving world and brought the very best wicker articles within the reach of everybody.

THESE REMARKABLE INVENTIONS ENABLE MR. LLOYD TO USE THE BEST OF RAW MATERIALS; TO EMPLOY THE HIGHEST GRADE OF WORKMEN; TO ADD THE LATEST REFINEMENTS—IN OTHER WORDS—TO PRODUCE SUPERIOR ARTICLES FOR FAR LESS COST TO EVERYBODY.

That's the Power of Invention.

THOUSANDS OF DEALERS ARE NOW selling the LLOYD LINE. Go to your favorite merchant and look at his Lloyd Loom Woven Furniture or Baby Carriages. If you are none, fill out the coupon and send it to us and we will help you get just what you want.

LLOYD LOOM WOVEN FURNITURE is just being placed on the market. In three years Lloyd Baby Carriages have been sold in larger numbers than any other kind. So great has been the demand for Lloyd Furniture within the few weeks it has been on the market that the factory has been obliged to work nights. That's a sure sign of quality these days.

Coupon C. M.
THE LLOYD MFG. CO.,
Menominee, Mich.

Please mail me your booklet
on Lloyd Loom Woven
Products.

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